RECURD

ORPT Bot Plowman

TIMOTHY PLOWMAN BOTANY DEPARTMENT FIELD MUSEUM OF NATURAL HISTORY CHICAGO, ILLINOIS 60605

11769

Topenscholas suchense Bromble, -/ Harry huther SEL

Palms of Peru = Schunke. String Eps wolftkoniski book

Florida 67 H 5: 143 162 skeets + 51:213 Peru 802 H's 3562 skeets



ACCOUNT BOOKS

144 PAGES • 7% IN. x 51/4 IN. (20 cm x 13.4 cm)

AILABLE AS:

). 64-5400 (2044-J) JOURNAL). 64-5402 (2044-SEL) S.E. LEDGER). 64-5404 (2044-DEL) D.E. LEDGER). 64-5406 (2044-C) CASH). 64-5408 (2044-R) RECORD). 64-5482 (2044-1) RECORD-Ind. A-Z

RNON McMILLAN, Inc., ELIZABETH, N.J. 07208

One measure of my distractedness is that it wasn't until today that I #10903 was even able to come up with the one identification that I knew I knew--or had known, anyway. The Kaffir Lime is Citrus hystrix, also known as the "Papeda." The Thai name, which sounds like "mahgud." is probably to be spelled "makrut." The Burmese name is said to be "shauk-nu" or "shauk-waing:" the Cambodian. "krauch soeuch;" and the Indonesian "jeruk purut" or "jeruk sambal." I draw this information from Alan Davidson, Seafood of South-East Asia (Singapore: Federal Publications, 1977), p. 206. An excellent book, by the way, with nice illustrations of the fish or other seafoods (some in color), illustrated discussions of the uncommon cooking ingredients, and then a tempting selection of recipes. Note from Elling Eide, 12 June 1982.



11551 \$ 11553.

Collector: T. Plowman

Determination:
Digitaria insularis(3) Mez ex
Ekman
Determined by:
Run83

This specimen has been sent as a gift for determination. When determined, please return this slip to Department of Botany, Field Museum of Natural History, Chicago, Illinois 60605-2496, U. S. A.



n m

Collector: T. Plowman

Determination:

Panicum parvilolium
Determined by: Jam-

This specimen has been sent as a gift for determination. When determined, please return this slip to Department of Botany, Field Museum of Natural History, Chicago, Illinois 60605-2496, U. S. A.



f. oligosanthes 1086 & Poligonston Syl

Collector: T. Plowman

Determination:

Parecune Senbrenamum

Determined by:

This specimen has been sent as a gift for determination. When determined, please return this slip to Department of Botany, Field Museum of Natural History, Chicago, Illinois 60605-2496. U.S.A.



Peru

Collector: T. Plowman

Determination:

Paspaleen Candidum (H.+13.)
Determined by: pup83

Kunth

This specimen has been sent as a gift for determination. When determined, please return this slip to Department of Botany, Field Museum of Natural History, Chicago, Illinois 60605-2496, U. S. A.



NOV 1 5 1981 . 10400 FLORIDA: Sarasota County. 15 Nov 1981. Sarasota. Indianola". Sea level. Coll. T. Plowman, E. Eile zud J. Halton 10900. Fortunelle hindsii (Chemp.) Swing'

(" shan chieh"

F catt. Sping thrub 2 m. tall. FAI. yellon. 10901. Citrus medica L.

-80

(3) "common citron" Form, very evometic. Flesh pele yellow.

10902. Microcitrus sp.

Form new guines

(3) n.v. kaffir lime "makerut" (Thai) (3/ Cut. tree 4 m. toll. Sterile. Lus.

used in Soups for flavoring. 11.4

(2) nr. nippom kumquet X satsuma Kumquet BH Cult. tree let 3 m. tall. Frs. sellon-green, juice very sour. Citrus deliciosa Tenore 10905. BH F "willow tengerine" Willowy Freelet 3.5 m. tall. FRS. greinish overge, fleshy NY oringe, sweet. · (Thumb.) Sum 10906. Fortunella margarita (Lour.) Swing. x E japonica (2) n.v. meiwa "kumquet". Cult- tree let 3 m. tall. F BH Fas. green, turning orange. Flesh pele yellow. Seeds green > Citrus limon (L.) Burm-f. cv. 'Meyer'
10907. Citrus limon (L.) Burm. J. x C. Sinensis (L.) Osbeck Meyer's Lemon BH (3) Cut. tree 3 m. rell. 5 FRS. greenish yellow. Flesh NY pele jellon, Join

10908. Fortunella margarita (Lour.) Swing. BH (2) n.v. magzini kumquet Cult- Tree 3.5 m. fal. FRuits orenge; flesh very pole yellow. 10909. Citrus madurensis Loureiro (3) 7. v. calamondin Cult- tree 2.5 m. tall. Fruits BH orange. Fleshy orange, som. RB Citrus sinensis (L.) Osbeck n. v. Valencia orenge BH (3) Cult. Tree 4 m. tall. Fruits yellowish green. Flesh overngy yellow, somewhat sown. 109/1. Citrus x paradis: Macfad. (C. maxima x C. sinensis) Royal Grape fruit Cult. Tree 4 m. tall. FRuit yellow. Flesh pale divty yellow, Sweet. 10912. Citrus sinensis (L.) Osbeck

(1) "novel oringe"

Fult-tree 4.5 m. tall. Fruits

greenich yellow. Flesh pale

greuse

POR 1 5 1981

Citrus sinensis (L.) Osbeck Cv. 'Hamlin' n.v. Hemlin Orenge BH 4) Cult. Tree 5 m. tall. Fruits FNY orenge. Flesh orenge, very Sweet. -> Citrus × limonis Osbeck 10914. Citrus reticulata var. austera Swing. H (3) n. v. Vangpur lime" BH (3) Cult. tree 3 m. tell. Fruits FNY very sour. Let. Citrus X nobilis Loureiro Cv. 'King'
N. V. King orange (C. reticulata x C. sinensis) 10915 BH (2) Culf. tree 4 in fall. Fruits

derk gree. Fleshy overge, sweet.

10916. Citrus

7. v. Tien Chieh menderin'

Cult-Tree 3 m. tall. Fruits

overge: Flesh overge, vether

Sour.

10917. Citrus aurentifolia (Christm.) Swingle

BH (2) N.v. Key lime

green, Fleshy pole green, very sour.

The "Tien chieh mandarin" was purchased under that name about ten years ago in the nursery department of Grant's here in Sarasota. That's the only time I ever saw it for sale, and so far as I know it is not really in the trade. I suspect, however, that the citrus experiment station at Lake Garfield. Florida -- or perhaps the one at Riverside, California -might be able to help with the identification. The lost item I had hoped to find is a master list of citrus varieties -- recorded, I think, by the folks at Riverside -- on which, as I now recall. I once saw a varietal name that was, at least, pretty close to "Tien chieh." I might caution you, however, that "Tien chieh" could be nothing more than an attempt to transcribe the Chinese for "sweet citrus," and as that. if it is that, it could have a rather wide and loose range of applications. The tree does, under our conditions at any rate, have some distinguishing characteristics that may eventually help you with the identification: 1. The tree itself is remarkably small, rounded, and of a weeping habita bit reminiscent of the China mandarin (= Willowleaf, = Willow tangerine?, = Citrus deliciosa?), but the branches are more pendulous. 2. Most distinguishing is its characteristic of bearing fruit in rather large clusters -- tight clusters -- and in this it resembles no other orange or mandarin that we grow. 3. It should perhaps be considered more an ornamental than anything else--the fruit is small and not very wonderful. In flavor it is not much better than the Cleopatra; in size and color and peel characteristics it is perhaps midway between the Cleopatra and the China mandarin. The fruit is by no means sour, but it is not so sweet as to bolster one's confidence that "tien" does transcribe the

Note from Elling Eide 12 June 1982

10916

Chinese for "sweet."

¥10916

91601

For the "preserving orange," your guess is probably better than mine. Someone who was out here once--probably the County Agent--thought it might be the same thing as the "Wilson shell." but I have never seen anything on the "Wilson shell," either, so that doesn't get us anywhere. All I can tell you is that, to the best of my recollection, my parents got their original budwood from friends (or friends of friends) over in Arcadia. The variety may well have originated with those people, and the name "preserving orange," itself, either with them or with my parents. Note from Elling Eide, 12 June 1982.

NOV 1 5 1081 10918. Citrus sp ? (3) n.v. preserving orange. Cult- tree In- tall. Fruit grewish orange. Fleshy creamy white, inealy". Citrus reticulata Blanco -10919. n. v. Satsuma mendarin BH (3) Cult- true 3.5 m - tall. Fruits yellowish green. Flesh overer surest. NY ovenge, sweet. 10926. Citrus me diea L. vor. sarco dacty lis (Noot. (2) Hand of Buddha Citron" Swingle BH(2). Cult. treelet 2.5 m-tall. Fruits pele gree, white within, (4) Cleopatra Mandavin (a Common rootstack) Cult tree 4 m. fall. Fruit green, flesh ovenge.

ded 1 5 1981

10922. Citrus aurantiifolia (christm.) Swingle cv. 'Tahiti' (2) M. V. persian or Tahiti lime gree. Flest pele green, som.

~ 10923. Citrus x nobilis Loureiro cv. 'Temple' (B) 4 n. v. Temple Ovenge.

F no Culf. Tree 4 m. tall. Fruit

Ovengy green. Flesh paid.

PLAS ovenge, sour.

10924. Cithorexylon Sp. (?) Verl.? (4) Calt. treelet 2.5 m. tall. grow from seed collected

2t Pebas, Dept- Loveto Peru. Plournen et al. # 7314.

10925. Citrus maxima (Burm.) Merrill (4)

Jult tree 5 m. fall. Fruits gellowish with desh green dots.

F-2 BH

NOV 1 7 1981 Selby Botanical gardens. Dracontium ornatum 17 NOV 87. 10926 (3) Cultivated toberous herb Z m. F-3 tell. Petiole rough with small sping excrescences, mottled with > snoke-like pettern. Blade fernate, divided. Infl. 1.2 m. tall. Polumb mottled. Spothe exect, novicular, a bexielly derk purplish brown. red purple traverdo best. Spedix dark purple-brown. Then collected is the wild at Centinela, Prov. Pichincha, Ecuador. Selly Acc. # 78-2173. 10927. Calathea ecuadoriana Kennedy Marant. dt. H. Kennedy 1986. Cult- herb. Petrole, pulvinus + leef underside deep red-purple. Leef derk velvet green 2 bone with Central yellow green stripe. SEL 78-1226. Limon cocha. Madison et al. #5480

DOV 1 7 1981 10928 Calatha of varians Koern. Calt. Lerb. Petiob Brown with light ten hairs. Pulvinus redduct Lest underside red-purple, shing, lest shing, dark green above. SEL 80-570. Plownen 10061F Brezil; Bahiz: Itacaré. 10929. Calathea contrafenestra Kennedy Cult. herb. l'étible red-purple. Pulvinus greenish gellow. Leaf blede shing above, gellow-green with derh broad sceleritorin bands, dert gree et mergin; undersides bull pele greenish greet with red-puncm. bend et mergin, the mergin itself office green (i mm wide). Pedunche pun-plish torum. Breets light green. Seples pole grie - Fls. White. Medison et 21. 5400.

Ecuador, Napo: Limon cocha

Cultivated plants: **GOV** 1 9 1981 80 Mizmi, Florida.

19 Nov 1981. Coll. T. Plowman 10930. Dizudrolyra tatianse Soderstrom (') Cult. herb. Leaves red-purple F beneath. Grown from cuttings of FTG 81-698. Plowmen 10114A: Brezil: State of Rio de Janeiro. Facarepagua. Vergen grande. 21 Apr. 1980. 10931. Raddia brasiliensis Bertol. Gram Cult. clumped cespitose herb. (1) grown from Plowmen 10174G: Brazil: State of Rio de Janeiro. Distrito of 1 we FTGT 81-697. Jerdin Botanico Horto Florestal. 25 Apr 480. Erythroxy lum fimbristum Peyr. 10932. Calt. shrub Im. tall. Lvs. medium (4) green, somewhat shing above, dull pale green benestt. Morgin undulate. Grown from Plowmen 3 7573: Peru: F NY MO Dept. Husnaco. Tingo Maria, 5 July 1978. WAG sento to Lyon.

doc 1 9 1981 10933. Engthroxylum ligustrinum DC. (1) Cuet chlorotic shrub 0.3 m. tall. grown from <u>Ploumen 7726</u>: Venezuela De Territorio Fed. Amazones. El Tobegon de la Selva ; 35 km 5. of Puerto Ayacacho. 21 Feb. 1979. -> Lyon Art. det. T. Plowman 1987. 10934. Engthroxylum coca Lam. ver. ipadu Plowmen Cult. slender erect shrub 2 m. tell. young fruits green W Grown from cuttings of Ploumen et WAG al. 6663. (clonofype). Peru: Dept. Love to. Prov. May nes. Rio Ampiyacu. 10935. Engthroxylum cincinnstrum tegr. Cult'shrub 0.4 m. tall. grown from young plants of Plowmen 10174. Brail: State of Rio de Janeiro. Lyon City of Rio de Jeneiro. Horto Florestal. 10936 Engtheroxylum cumeneuse HBK. (1) Cult-Shrub o. 4 m- tall. gioun from young plant of Houmen 7073 A. Venequelo: Distrito Federal. Caracas. Jerdi Botanico.

10937. Engthroxylum squamatum So. young plant of Plower and 10062 Brogil Lyon (1) Bahia : Itacaré. 12 Apr 1988. Sut to Lyon. En Plouman 10172. F 10938. En thronglum magnoliifolium St. Hil. Cult. Shrub 0.5 m. tall. (3). (ult. Shrub ...
find) grown from young plant if Plowmen
R. I. Rio de Janeiro. Mun. 10101. Brazil: Rio de Janeiro. Mun. Jacerepegué. Vergen grande. 21 Apr. 1980. NY A-JP Brunfelsia zmericana L. 10939. x B. lactea Kr. + Urb. (3) Cult. Shrub 2 m. tall with long virgete erching brenches. Corollal white fod ing to creemy yellow: BH K A-JP 10940. Engthroxy lum shatons Peyr. Cult. shrub 1.5 m. tall. Fls. cream. grown from cuttings of Planman 6046. Peru: Dept-Jan Martin. km. 24 from Tarapoto to Juanjui. 5 May 1976.

MOV 1/9 1881

10941. Engthroxylum coca Lam. var. coca Cult flores I m. tall - Fls. creamy white · grown in pot. Ex (1791. QCA HUA - 10942. Engthroxylum Cocs Lam. var. coca

(3) Cult shrub 1.0 m. tall. Buds cream. Lus. chlorotie COL tage (Plented in ground). Ex 4711.

10943. Erythroxylun pulchrum St. Hil. (2) Cutt Shrub 1 m. tall. Lus shing both sides. grown from young pleuts of A-JP

Plowmen 10173. Brazil: Rio de

Janeiro. Rio de Janeiro. Horto

Florestal. 25 Apr. 1980. 10944. Ery Huroxylum cuspidifolium Mart.

(1) Cuet. Shrub 0.8 m. tall. grown from cutting of Plowmon 10172. Brozil: State of Rio de Jeneiro. 2. {Mun. Jecerepagus. Vargen grande. 25 Apr 1988.

Engthroxylum undulatum Plowman (2) (ult- Ihrub 1 m. tall. Brenches long, erect. Lus. shing both sides, mergin undulete. Journ from F smell plent of Plowmon 7667A. Venezuela: Distrito Fe deral. Careces. Justituto Botznics. 5 fel 1979. = 10946. Diplopterys cabrerana (Custr.) gates. (1) Cult. Scendent Shrub I in. tall. grown from cutting of Plonoman 6040. Peru: Dept. Son Martin. Tarapoto. 10947. Brunfelsia americana L. X B. densifolia Kr. + Urt. Cult. Shrub, 30 cm. tall. Hybrid. Seeds plented Oct. 30, 1980 (1) Cuet. Shrub 30 cm. fall. Instituto Botenico.

- 10949. Enthroxy lum cumanense HBK. (2) 'cult shrub 60 cm - tall-Lus. dark green above, pele green beneath; Ismage & Somewhat 2+ 40° F. grown from young Plut of Ploumen 7810. Venezue la: Sucre. Cumen 2, 3 Mar 1979. Erythroxylun cumanense HBK. Colt. Jhrub 30 cm. tall. to Grown from cuttings of MO Ploumen 7810? Venezuela: Jucie Cumana. 3 Mar 1979. Enthroxylum confusum Britt. 10951. (3) Cult erect shrub 2 m. tall. fotor Lus. duel medium gree abore, very pole dull gree keneath. Grown from young plant of Plowmen . Veneguela: F A-JP Distrito Federal Corseas. Fairchild gentleus #63-251

10952. Englaroxylum ulei O. E. Johns Cult Shrub I m. tall. F of Ploumon & Johnse 5808. A-JP WAG Peru: Son Martin. To cache. Miramar. or from hybrids I made?) (2) Cult-Shrub 1 m. tall. F (2)
grown from seedlings of Plowmon

**Y Davis 4847. Peru: Cuzco. Echarate. undulata 3350 10954. Brunfelsis plicate Urb. x (2) B. jamaicensis 3361. (or vice vous). Cult. hybrid shrub \$.0 a. F-2 tell with erect virgete brancher. BH Lus. corisceous, shing dark green somewhat shing. Fruits coppery green, sking. By greenhouse door Cross made Jul 1976. First Bloomed Feb-Mar 180

pat 1 9 1981 10955. Brunfelsis latifolia Benth. Cult. Shoub 0.6 in fall pot. Porolla pele violet fading to white grown from cutting of Ploumer 3353 Mo NY CORD Brazil: Rio de Teneiro. Restinga 1317 de Jacané pagus. 10956. En throxylum ulei O.E. Jehulzi Cult- Shrub 1.5 m. tall. Steril. grown from cutting of Plournen et al. 4184. Colombia: tundinamente. Tolima: entre Melger & El Carmen de Apicalà. 19 Aug 1974. MO F Calt. shrub 1.5 m. tall. Calt. Shrub 1.5 m. tall.

Grown from cutting of Ploument tous

4301. Colombia: Cauca. Et Boreto.

Mojarras. 27 oct 1974. 10958. Erythroxylum williamsii Standley ex Ploumon
(2) (alt. Shrub I m. tall. grown from young

plant of Plouman 7756. Venezuela:

Terr. Fed. Amzzonzs. Puerto Ayacucha.

20 nov 1981. The Kempong. Mismi. 10959. Epiphyllum (1) cult Epiphytic cectus with scendent brenches. Fl.s. tube cream, petals white. 10960. Enthroxylum novogranatense (Morris) (5) Hieron. ver. novogranateure.

Cult. Shrub 3 m. tall, devely

CEL brenchled. F/s. cream. Ripe

GB

City fruits red. Very abundant MAG flowering. F (1) Cult. tree & m. tall. Fls. n.v." white sepote" ded 2 12981 nov. 1981. Miami. Fairchild Topical garde 10962. Erythroxylum Confusim Britt. F MO stems 4-5 in tell. Fruits green selds. K turning bright red.

Dec 2 1 1981 Mismi. Fernandez. Cryptochlos capiflata (nees) Siderstrom comb. nov. (4) (Olyra capillata Trin.) F-2 Cuet cespitose herb us young leves purplish. MO grown from rhizomes collected at Brezil: Ris de Jeneuro. Horto Florestal. Plowner 10174 J. det. T. Soderstrom Brufelsiotjen-plic-und Tell virgate shrub 3 m. tall.

[Planted i yard, west well by]

(beck door MO FIS. Solitary, tube pele green. Limb white, fading to some yellow. (= 12055) 10965. Brunfelsia Lactea Kr. + Urb. Cult. shrub 1.5 m. tall. (3) Fishe Fls. very fragrant, fube very pele violet to whitishs Limb pure white, truning pele F 10 CORD yellow. Pby street

Brunfelpia americana h. x B. 120100 Kr. + Urb (3385). (3) Cult. zhrub 2.3 m. tall. F Conslla tube pele greer. Limb pure whitesomfurning pele yellor. MO CORD BH at front door right. AF # 78-18. Peru: Dept. Lima. Ina. Lima. Coll. T. Plowman 24 Nov 1981. 1096 f. Tetrastigma voinieranum (Baltet)
1096 f. Cissut Pierre ex Gagnep. Vitac.
F (1) Coarse fleshy vine. Cultivated. Sterile. det. T. Plowner F 10968. Morus albs L. Mor (SM (3) Cult. Street tree 6 m. fall. MO Stigmes white. Fruits reddish. morrec. MO (3) 10969. Cesuerine equiset i folia J.R.+g. Forst. Cesuer,

(1) Cult. Street tree 8 m. fall.

Young fruits green.

usm (3) Cult. street tree & m. tall. Joung fruits green det R. Geresa 87

pendula Planch. ex F. Muell.

F. 10971. Harpullia arborea (Blanco) Rodlk. Sapindac. MD (3) Cuet- street tree 8 m. tell. Fruits reddish orange tell. Fruits reddish orange, yellow within. Seeds shing black. 109 fz. Setcresses pollido Rosa Commel.

Fust (2) Cult. creeping herb. whole

plant red dio L purple. Fls. pink. F (2). Cult. tuberjourns herb. Fls.
jund. weedy. USM (3) Weedy green in garde.

Mo (3) Leedy green in garde. (3) Weedy annual in garden.

USM FIS- white. Rosse. 10976 Ross (1) - Cult- ornemental 1 m - tall.

Petals pink. 10977. Rosa (1) Cult. ornzmertal shrub 30 Co. fall. Fls. deep pinh. 10978. Dichorisandra thyrs. flore Miken Grunel. Coarse cultivated herb 3 m. tall. Colyx blue - violet. Petals deep blue, white et bese. anthers pele yellow. Solonac 10979. Brunfelsis zustralis Bent. Fls. violet with white eye. feding pure white with age. Very fregrent. Ery throx. Enythroxylum novo granateure (Morris) det. T. Plowmen 1981; Cult. Thrub 2.5 m. tall, single trunked. Leaver bright yellow-gree. FKs. cream, INIPA faintly foetid.

Given from seeds of Ploumen Mo 45 A Vaughan 5373 collected:

usm 3)

Colombia: Dept. Cauca. El Bordo. 30 Jan 1976. 10981. Solenum americanum Mill. var. Johne. Weed in flower gevolen In. tall. Fls. white. det. M. Nee 1/82. 10982 Galinsoga quadriradista Ruist Pavon Comp.

F (3) Weed to in flower gardle.

Rays abaxially red, adaxially pinh- Petioles dank red.

10983. Oxelis corniculata L. Oxalid. F (2) Creeping weed in flower gerden. Fls-yellow- det. P. Matekaitis 1993

10984. STELLARIA MEDIA (L.) VILL. Caryoph.

F (2) DET. A. CAND 1989

Creeping delicate weed in gerdens. Fb. white:

10985. Euphorbio trrucelli L. Euphorb.

F(1) Cult. Shrub 2 m. fall.
Milky letex. Sterile.

10986. Euphorbis

(1) Annual cult. herb. Sepcloudy.

Lesves green with dech red-purple

100 central + besal post. Fls. green.

F (2) Cultivated twining vine.

Sterile.

Beselled.

NOV 25 1981 muses de Historia Matural. Coll. T. Plowmen +

10988. Colendula officinalis L., Compos. BH Rays yellow. Ornamental.

Rays yellow. Ornamental. det. M.O. D:110n 1982 10989. Gerbera jamesonii Bolus extlook.f. Comp. (1) Acarlescent cultivated herb. F Rays deep salmon. Disc yellow. Odnamental. Let. M.O (Dillon 1982

10990. Physalis peruviana L. Solanze.

(2) Cult. herb & m. tall. Fls. yellow
with brown spots at center

with brown spots at center

BH (2) Cult. Subshrub Im. tall. Celyx 2nd F Corolle bright red, Ornemental.

det. M. nee 1882

Louteno 1 m. tall. Fls. lovender. Ornemental. 10992 F (2) F(2) Cult. ornemental vine 3 m.
fell. (onla white, furning
yellow with zge. Fregrent. For pole blue. Lat. 7 Plumbagin.

Fis. pole blue. Lat. 7 Plowman 1982. F (1) Weed in flower ked. 10996. Sonchus oleraceus L. Comp. F (1) Weed in flower bed-Petioles red purple. det. M.o. Dillon 1982. F (1) Weed in flower bed. Fls. green. 10998. Lentene Vest.

Ny (3) Cult shrub 1 m. tall, hedgeplent.

where Fls. yellow, turning deep pink.

10999. Solonum firanuloso-leprosum Dunel. Glanac.

WSM (2) Cult. Shrub Im. tell. Fls. pole

Violet. Mature fruits dirty gellow.

Jet. M. Nee 1982. 11000. Eleutherine bulbosa (Mill.) Urb. Iridac. fotos:

Cult. ornemental herb. Bulb

fotos:

Leep red. Fls. pure white Anthers yellow

All PTBG Th. V. "piri piri" = bulb land against snake lite, c by

Sel lite stwomen after their period to prevent future conception 11001. Eupstorium uber B.L. Robinson Comp.

F (3) Caltivated Shrub 3 m. tall.

det. M.O. D: 110n 1982. Comp.

F (3) Weed in flower beds. Rzyo white. Disc yellow. Let. M.O. D: llon 1982. 1003. Galinsoge quadriradista R. 4 P F(2) West in Flowerbed. Rays white. 5 Disc yellow: Let. M.O. Dillon 1982.

11004. Plentego major L. Plantagin.

F (2) Weld in flower bed. Fruiting

Mo Spikes deep red purple.

F (3) Low sprewling weed in flower bed.

FIS. pele green.

F (V nv. paico"

Enet weedy herb i garden.
Foliege footid-arometic. Changood. F (2) Cult. Treelet 3 m. tall. Budo
green. Solanze. 11008. Brugmensia suaveolens (Humb. + F (3) Bompl. ex Willd.) Bercht & Presl. Caltivated treelet 2.5 m. tall. Fls. held at oblique (co. 45°) angle. take greenish cream. Linb deep Salmon pink. Authors Connivent. Joearenda mimosifolia Don
11009. Jacerenda angustrifolia HBK Bighon.

F(2) Cult. Tree 8 m. tall. Fls.

pale blue. det. A. Gentry 1982. 11010. Piles microphyllo Liebm. Urfic. (1) Commonly Cult. herb. Whole

plant gellowish green. Stems son

succelent. Planted 2s > border.

11011. Tripsseum Indersonil Gray Gram. F (5) Coarse clumps-forming herb 4m. MO-2 tell, cultivated. Spikes jurple. det. G. Davidse 1985. 11012. Nicotiana tomentosa R. +P. Solonac (1) det- M. Nee 1982. F (ult. Treelet 3 m. tall. corolla tube creany white. Limb rose-pink. Museo de la Solud, Lima. 26 nov 1981. NOV 2 6 1981 Coll. T. Plowman 11013. Phoseolus lunstus L. Legum n.v paller pintado F (5) Grown from seeds de de collected usm RUG From a feral plant in an abandoned garden at Pers mongo by Fernando Cabieses. Apparently not cultivated but seeds used for food efter cooking in the changes of walls. Extensive vine 2 m. tall forming dense clump. Petals white turning yellow with egg. no elhaloids fresent in feeds set. D. McKenna may 1982.

NOV 2 6 1981 umbell Sanguisorba minor Scop. F (3) n. u. pimpinela Cult herb. Infl. pole green. Medicinal, token for the Stornech. usm Mo NOV 2 9 1981 29 nov 81. Bojada de Mireflores. Coll. T. Plowman & P.M. Rury. Tessaria integrifolia Ruiz + Pavón Comp. F 11015usm (3) Cult. Tree 3 m. tall- Fls. pink. det. M.O. D. Mon 1982. 11016. Desmodium intortum (Mill.) Urb. Legum. Cultivated sub-erect herb f (3) USM GH in perke- Petalo White et base, pele volet at exer + margins. Let. C. Niezgoda 1982. 11017-Vigno bidentata Hook. legum. F Suberect erect weed i moist USM area in perh. Fls. dirty pink. det. E. Nieggoda 1982: 11018. Alternanthers pubiflora (Benth) Kuntze Amoranth. F (4) Cult. scandert heit. Stems USM and folisge deep red-purple. PH Infls. clean. det. J. A. Mears 1982.

FAU(3) Extensive vine on dry sea cliffs.

FAU(3) FIS. Ineggnta. WM (3) 11020. Trop seolum majus L. Cropseolse. F (13) Extensive herbereous vue -SM' NY moist eres on seacliffs. Petals MO LA bright red-orange, tank claw (Juith 11021) S Anu 1021. Tropadum majus L. Tropaeolse Extensive herbeceous vine on seediff. Petals golden yellow BH w. I derk moroon spot at center. (with 11020), ust (2) The Shruh? Myoporac Shrub 2 m. tall. +15. White. det. C. Nieggoda 1983. 11023. Phylo nodifloro var. conescens (HBK.) Mold. Verb. cliffs. Fis. pour by sea cliffs. Fis. pinh Us: fleshy. (3) Prostrate vine a dry sea cliff. FIS. pele pint

det. H. Moldenke 1983.

Perkinsonia 2 culeata. Leg. F 11025. Cult. armed free & m. fali. Fls. yellow with red spot at base. usm(2)11026. Godetia Clarkia (1) Flowers sold in Mercado de Surguillo. Petals rose-pinh, pele et the margins. "godetia" PERU: Dept. Lima. Lima. NOV 3 0 1981 Musto de Historia Natural 30 100/1981. Javier Pradoj: Av. Arenales 1256. Coll. T. Plowman. 11027. Dolichos lablab L. Legum. Cult. Lerbaceous vine. BH seed Lus- dork green above, donk red purple beneath. Steus, rachis 田岭 and fruits red purple. Flowers light red-violet. (1) Cult. grass 9.6 n. tall. Infl.

yellow-green. 140 11029 Acolypha infesta Poepp.

F (4) Weed in garder. Fls. gree.

WHA Let. M. J. Huft 1982 Eup h. INPA

NOV 3 0 1981 A. ELEGANS MAST. DET. F. GONZALEZ 1990.

folo (2) act. vin 4 m. tall. Fruits brown.

get = Jeon wintrand, MCZ det. K. Barringer 1984

11036. Furnaria capreolata L. Funar. F(2) (uet. vine. Fls. greenish white BH with spical boun spot. 11032. Acmistus arborescens (L.) Schlicht. Solan. F (3) Cult. True 3 m. tall. FIs. cream. 11033. Crinum x powellii Hort. ex Bak. cv. Album Ameryll. F.2(3) Cult. bulbous herb. F1s. Revenue peure White. det. A. Meerow 1983.

BH

FLAS

(+lippestrum vittstum (L'H FLAS

(+ lipplostrum vittstum (L'Her.) Held.)

11034. Amory Ilis vittsto L'Herit. Amory l.

F (5) Cult. bulbous herb. Tepela It.

K Revenue greene at bese, abexielly, whitish start bese to red at spex; adexially white at bese, to red at apex with central white stripe. Pe duncle glancous. 1035. Euphorbis peplus L. Enphorb.

FUPA (2) Common weed F1s-yellowish gleln.

det. M.J. Huft 1986.

(5.+c.) Schwerin

F-2 (4) Cult. Treelet 4 m. tall. F1s. White. FR. black. NOV 7 0 1981

11037 Barnadesia caryophylla (Vell.) Blake Comp. LP (2) Culf. Shrub 1.5 m. tall. Fls. pinh. det. M.O. D: 110n 1982. 11038: Nicotiano paniculata L. Sol. F cultivated is garden. Fls. greenish
NY yellow. 2. + 1/2 n. 120 yellow. det. M. Mer 1982. 11039. Buddleis pseudosmericans Norman, & nor ind.
11039. Buddleis dimericana L. det. E. Norman Logan. (2) (alt. Shrub 3 m. tall, Fls. cream. = B. RUFESCENS WILLD. EX SCHULTES & SCHULTES DET. E. NORMAN 1990 11045. Haplothus Deruviana Englis Anacord. F (3) cult tree 9 m. tall. Old fruits BH K 1041. Acacia macracanthe H. &B. Lyum. F K gellow. det. C. Niezgod 2 1982. L'LEUCOCEPHALA (LAM.) DE WIT SUBSP. GLABRATA (ROSE)
11042. Leucaena glauca (L.) Bent L. DET. S. ZARATE P. L. QUA.
(2) Cult. tree 5 n. fell. Fls. white. F FRS. brown. det. C. Niezgoda 1982 PERU: Dept. Lima. K LIMA: Jesus Maria. F 11043. Solanum hispidum Pers. Solana USM (2) Cult. warse armed Shrub 3 m. tall. Fls. white. Planted 2s ornamental. set. M. Nee 1982.

DEC 1 1981 DEC 1 1981 Beru: Dept. Lima. Lima. Museo Peruzno de Ciencia de la Salud, Av. Grau. Coll. P. Plowman 11044. Peperomia golioides HBK. Piperse

(1) Erect succulent herb, cultivated in herb garden. Spihes green.

N.v. "congonha" = taken in infusion for cough; taken as a pleater fresh plent is ground with shake or lizerd vil for broken bones.

lizerd vil for broken bones.

lio45. Amerenthus

From (2) Cult. weedy herb. Fls. green. Foliaje

used as spinach. Skus ved at very base. 11046: Amerenthus

F (2) Cult. weedy herb. Stems red is lower

word helf. Fis-green. Folizier word 21

Spinach. F(3) Cult. weeds herb. Stems red only
usm

PH used as spinzer. Let. J.A. Mears 182. 600) (1) voucher Sult. Shrub 40 cm. tall. Voucher

DEC 1 1981 Dec 1981. Lima city, Magdolena. AMARAW Thus viridus L. fmar. growing in crack of sidewalk in front of CAAAP on Avenida Gonzales Prada 11049 F (4) Magdalena, Limit det. C. Niegoda 87 GB DEC 12 1981 Peru: Dept. Lima. Lima. Miraflores.

2 Dec 1981. Coll. T. Plowman:

11050. Erythrina falcata Benth. Leg. · Cult. Tree 4 m. tall with Spread - ing crown. Calyx and corolla F (4) Loep red. det. C. Niegoda 1982. (3) Weedy substrub I in tell. Regs white. Disc yellow. 11051. Bidens pilosa L. 11052. Heliotropium arborescens L. Borzgin. (2) Calt shrub 1.5 m. tall. Fls. usu pelu blue-violet, fregrent of lilec 11053. Oxolia pes-caprae L. Oxolid. (b) Weed in flower garden. FIS. bright cadmine yellow. 11054. Nolana humifusa (Gouzn) Johnston Nolanas. usm (ground cover). 1-1s. pole Violet with deep

violet nectar quides. Museo de Historis Natural, 3 DEC \$1.1981 11055. Tagetes multitoro minuto L. Comp. av. huacatay det. M. O. Dillon 1/82. Calt. herb. Rays pale yellow. Used extensively in sences and as a condiment and medicinally. cold (3) 11056. Vigna luteols (Jag.) Benth. Leg.
(3) Prostrate vine in waste area.
Fis. yellow. Let. C. Niezgoda 1/82. 1105f. Sighum bicolor (L.) Moench. Gram F (2) Toll cult. grass 4 m. tall, Mo rooting at base of branches, Jufl. July Jullow. det. G. Davidse 1/82 Elipta alba (L.) Hassk. Comp. Weed in moist area. Fls. while, det. M.o. Dillon 1982. Fny (3) Cuet. Tree let 4 m. tall. Fls. white. 11059. Eugenia mi floro L. FRS. red at maturity. 1060. Vitis vinifera L. Vitse. F. Gellow-green immoture. BH MO

LA

11061. Acalypha cf. mapirensis Pax Sp. hes yellow-green with red tinge. F (2) 11062. Medicago hispida Gaerth. F (2). Frs. green. det. C. Niezgod 2 1982. Umbell. 1063. Coriendrum Sativur L. V.v. "culantro" F (1) Cut. herb. Fls. white. Widely used in condiment. F (2) Cult. herbsceaus vine. Fruits purplish boch que of bergin, ummeture. Thiv. pallar' 11065. Lupinius Mutzbilis Sweet (3) Calt. herb 1.3 m. tall. Petals blue-votet benner white of center with gellow nector quides. n. v. terhvi RNG

11066. Ings feuillei DC.

F (10)

Calt. tree 12 m. tell. Colyx olive

USM Mo gree. Corolla dirty yellow. Filaments

Ny RNG White.

GH K

Ine: Climatron, Mo PERU: Dept. Pasco. Prov. Pasco. Road between Colquijirca and La Quinua, 5 Dec 1981. 16 km NE of Colquijircz. Alt. 3965 m. Coll. T. Plowmen & P. M. Rury.

USM (3) Prostrete creeping herby fls. yellow. 1068. Muchlenbeckia Vulcanica (Benth.) Endl. Polygon. USM/3) cushion plant in open pund. Fls. creamy white det. P. Matekaitis 1985

11069. Denothera multicoulis R. + P. Onagr. Mo hillside. Flowering breuchest prostrate. Flo. gellow-green throughout. Let. P. Raven 1982. LABIAT.

110 to. STACHYS PUSILLA (WEDD.) BRIQUET f (2) Prostrete herb in open puna. Fls. White. DET. N. HEDSOLD 1990

DEC 5 1981 F 11071 Relbunium of richardimum Rubièc. USM. (2) Cushion plant in open puna. Fls. white. Musci 11072. Barbula replicata Tayl. F (1) moss 2 mong cushion plents. det. W. C. Steere 1984 Comp. Senecio ferregrae Cabr. Erect herb i rock crevice along road. F15. yellow. det. M.o. Dillon 1982 # 11043. USM (5) 25.8 km. NE of Colqui jirca. Alt. 3680 m. Shrub 1 m. tell on open hillside with Berbesis Rolylepis ere. FIS. light reddish violet. det. M. Nee 182 CORD BH NY 28 km NE of Colquijirce. Alt. 3620 m. F (3) Growing on rock cliffs. Infl.
USM dark red.

DEC- 5 198 1076. <u>Peperomia peruviana</u> (Mig.) Dahls. Pipersc (2) Fregili tuberi ferous herb inong usm mosses on moist road bank protected det. R. Cellejas 1982. 11077-Coreopsis scherfii Blake Comp. USY (2) Streggly herb on balle 102d-benk. FG. yellow. det. M.o. Dillon 1982. F (5) Decumbert herb rooting at the NY K nodes. Fls. White. 110 79.

Froedside. Cap purplish brown. Stipe towny.

F 11081. Berberis

UST (2) Dwarf Shrub on opin rock cliff.

Fls. yellow.

15M (3) Suberect herb in wet area on No Voedbenk. Fls. pink. det. P. Hoch 1982.

Musi F (6) Mat-like moss on flatoper rock. yellowish det. W.C. Steere 1984

Tortula pichinchensis Tayl. det. W. C. Steere 1984 Bryophy. F 11082-B DEC 5 1981 12) Moss on vertical moist toodbook.

12) Moss on vertical moist toodbook.

1084. Marchanti F (3) gruing on vertical roadbank
- at wet seep. (3) Moss or vertical road bank. Brysphyt. det. W. C. Steere 1984 DEC 6 1981 PERU: Dept. Husinuco. Prov. Hus-Naco. 8 km. ME of Huanuco on Ford to Tingo Mario. Alt. 1750 m. Coll. T. Plowman + P.M. Rury

Annon. usm (5) shrub, 2 m. tall on roadbank in Citrus grove in (flowers) yellow-green tepals abaxially fleshy tepals greenish-white adaxially usm # 11087 Commelina diffusa Burm.f. Commela USM (4) sprawling herb in shade of Citrus trees Use flowers blue. det. R. Faden 1982. USM (3) Shrub ca. 3 meters on gravelly slope flowers creany white adaxial surface of petals

with wide green stripe - branches covered with Tillandoia

Lycianthes lycioi des (L.) Hassler Solanum lyciodes L. det. M Nee 1/82-Solanac. shrub ca. 1-2 meters onggravelly slope above #11088; pale violet petals, yellow at center; 11089

F (4)

MOCORD

anthers red-or Ange

Boerhavia erecta L. NyctagiNAC 11090 erect herb ca. 80 cm. tall from woody base dry open roadside; flowers magenta Fish (4)

NY-Lepidium DANIELSII C.L. HITCHCOCK CRUCIFERAS 11091

F GH herb in shade of fruit trees on cultivated USM MICH ground; flowers white and minute DET. I! AL-SHEHBAZ 1985 F 11092 JACATANDA OCUTIFOLIO H.+B. BIGNONIAC. MO K Tree 6 m. tall open, dry, gravelly slope

fruiting peduncles red, fruits pale green det. A. Gentry 1982. 11093 ISM (3) US SEL Tillandsia recurvata L. Bromeliac. epiphyte, covering densely branches of shrubs and trees of open, gravelly hillside det. H. Luther 1983.

INGA feuillei DC. det. C. Niegoda LEGUMINOSAE 11094

tree 8 m tall wy spreading crown cultivated USM MO near house; Corolla tube yellow green, white K ATTE within, filaments white Anthers pale green

11095 Inga feuillei DC. LEGUMINOSAE

F (5) habit same as # 11094, but growing on

Open gravelly slope; fruits pendulous,

dull yellowish green, twisted spirally

dot. C. Nieggoda 1984.

11096 Jatropha Ciliata Mull. Arq. Euphorbiac.

F (5) shrub to Im. tall w/ succulent stems and

USM

Clear sap, growing on dry open slope;

petioles + pedundes dark red; flowers

bright red, anthers red w/ yellow margins

det. M. J. Haft 1822

1/097 Nicotiana tabacum L. SOLANACEAE
(3+3) herb 1.5 m. tall growing in small clump

F photo along roadside Near houses, apparantly not

USM-2 cultivated; corolla tube white, limb pale pink

11098 Schkuhriz pinnata (Lam.) O. Kze. CompositAE

(3) roadside herb in moist places; involucre

USM booally green apically dark my red; Rays

US and disc yellow det. M.O.Dillon 1982.

11099 LANTANA VERBEN F (2)(3) straggly shrub 0.5 m. tall, dry open hillaide USM flowers very pale lavender

Ageratum congroide = L. Comp. 11100 herb 80 cm. tall in moist Area along roadside F (3) flowers in bud pole violet, turning white usm Chamaesyce Issiocarpa (KI.) Arthur EUPHORE. herb in moist place along open roadside 11101 F (3) bracts white U Chamassyce Lasiocarpa (KI.) Arthur EUPHORB. 11102 decumbered herb on dry roadbank along culvert leaves with central dark red splotch below middle F(3)usm MO bracts white Selaginella sellowii Hieron. F 11103 USM (3) GH Lycopodium det. R. G. Stolze 1982. creeping prostrate herb on dry, open, rocky slupe Waltheria ovata Cav. Stencu? 11104

USM Stem w/ milky SAP, Flowers pink

##66 Acacia huarango Ruiz ex Macbr. LEGum. F(2) Armed shrub / m. tall on dry, open slope USM flowers yellow det. C. Miezgoda 1982.

4440

PERU: Dept. HUANUCO: Province HUANUCO. 42 Km NE of HUANUCO ON road to Tingo Maria, before Carpish Pass Alt. 2480 m.

11107 $\{5\}$ terrestrial herb, ACAUlescent, with thick fleshy CAUDEX, growing in wet mendow along roadside Inflorescence dull reddish green; Terminal bud covered wy mucillage USM CRL NY-2

MARASMUS BASIDIO 11108 delicate, tiny white mushroom on decaying inflorescence of Gunnera #11107 (ibid.) = (1)

Munnozis Silphioides (Presp. + Endl.) Rob. + Bret. Comp. 11109 herb 1.5 m. tall on wet slope in cloud forest rays and disc bright yellow; stems w/ milky latex. det. M. S. D:1/on 1/82. F (5) USM TEX

PERU: Dept. HUÁNUCO: Prov. HUÁNUCO. Carpish Pass.

Alt. 2570 meters, 46 km. NE of HUANUCO. Coll. T. Plowman & P.M. Rural reflexus Fres det Stein 188. Centropogon autotus E. Wimm LOBEL.

pendulous shrub on road bank; calyx dark

11110

f (5)

USM

Duke K

USM

orange; stem w/ milky sap det. T. Plowmen 1/12.

Alt. 2490 m., 46.8 km NE of HUÁNUCO

Epidendrum mecrostachyum Lind! ORCHID erect orchid on steep roadbank; sepals 1//// f(2) usm

greenish brown, petals creamy white det. C. H. Dodson 1982 [RorippA] Necturtium officinale L. 11112 CRUCIF.

F(3) herb in running (open) stream Jaegeria hirta L. ComP. ////3 F(4) US USM herb on moist, open roadbanks

rays bright yellow, disc yellowish brown det. m.b. Dillon 1982. 11114. Alternantheralanceolata (Benth.) Sching AMARAN. (5) herb in wet, open stream bed; stems +

petioles dark, reddish purple; flowers

(subsp. which has bee called A. lehmannii) PH KNY

Tournefortia Boras. 11115 F (3) K trestet 3 m. tall on open road bank in cloud forest j flowers white, fruits white Epidendrum porpax Reichb. f. aff. ORCH.

spherb on steep bank, flowers dirty

yellow throughout. det. E.A. Christenson 1/82 11116 F (2) USM SAlvia macrophylla Benth. LABIAT scandent herb on wet roadbank corolla sky blue det. R. M. Harley 1982. 11117 F(5) NY 11118 CENTropogon luteus E. Wimm. LOBEL.

F (3) DUKE long, branched shrub harging from steep

USM roadbank; corolla tube red, limb yellow

dut. P. Matekaitis 1983 11118 Aegopogon cenchroides H. + B. ex Willd. GRAMIN delicate grass on moist road bank det. G. Davidse 1982 11119 F JUSM (3) USM open, bare soil on roadbank; Phizomatous det. R.G. Stolze 1982. DRYMARIA VILLOSA CHAM. & SCHLECHT. CARYOPH delicate trailing herb, in wet streambed flowers white DET. A. CANO 1989 11121 F (3) GB

11/22 Alchemilla aphanoides 11/22 Alchemilla (L.f.) Rothm. s.l. Rosac. 45(3) trailing herb, hypanthium red, perianth usu green det. E.G.B. Kieft 1983. 11/23 Polypogon interruptus H.B.K. GRAMIN (3) usy growing at edge of creek det. G. Davidse 182. 11124 Hyptis uncinoto Bonth. LABIAT F (4) my sorawing herb on moist roadbank, ca. 1.5 m usry hall, flowers white det. R.M. Harley 1982. (Lag. ex Sw.) Proctor

(Lag. ex Sw.) Proctor Cyperus andreanus harbalong open stream CYPER det. D. Adzms 1833. 11127 Galinsoga qua drira diata R. LP. Comp. F(2) herb in moist meadow; rays pink, disc yallow det. M.O. D. Mon 1982. 11/28 Paspolum scabrum Scribn. GRAMIN F(5) wet ARRA along roadside, Red stem at Nodes USM MO

Jet. Davidse 1/82. GRAMIN Isc.

11129 Fennisetum bambusiforme (Fourn.) Hemsley GRAM (5) USM growing along Road, on wet Road bank lety Gr. Davidee 1982. Leucocarpus perfoliatus (HBK.) Buth SCROPH 11130 f (3) USM corolla pale yellow, fruit white RhyAchospord Vulcani Bock. CYPERAK 1113/ (3) usm herb in wet meadow along stream det. w.w. Thomas 1986 Conyza bonariensis (L.) (ronquist COMP. 11/32 (3) erect herb in moist Area along creek, up to I meter tall, flowers creamy white det. M. O. Dillon 1982. tus Gnaphalium cheiranthifolium Lam. COMP 11133 F(3) USM US flowers creamy white det. M. O. Dillon 1982. 11134 Elleanthus erect herb on steep bank, flowers cramy yellow (2) usm Stelis

diminutive orchid on roadbook, flowers creamy
yellow, reddish at center 11135 . (1) usm

Approx. 50-52 km Alt. 2350-2430 m., Lepanthes sp. 11136 ORCHID diminutive orchid, steep roadbank, flowers w/ perianth Red Abaxially, Cream Adaxially fruit red + (3) USM FSEL Lycopodium reflexum Lam. VAR. MINOR LYCOP.

Small, erect herb on roadbank

det. K. Cr. Stolze 1982., B.OLLGAARO 1944 11137 f(2) USM 11138 Fuchsia decussata R. 4P. ONAGR F (3) USM MO scraggly shrub on roadboark, pendulous branches, flowers red (size N 10 meter) 11139 Pernetty a prostrata (Car.) DC. ERICAC low shrub on steep roadbank, fruits pink usm(2) 11140 Sphyrospermum cordifolium Benth. ERICAC low shrub steep roadbank, flowers pole pink det. J. Luteyn 1983. usm (3) Solanum macrotonum Bitter SOLAN.
erect herb in wet Area along stream;
flowers white, mature fruits green
det. M. Nee 1982. 11141 F(5) USMY CORP BH 11142 Elaphoglossum huzcssaro (Ruiz) Christ FERN fern on steep, (wed) roudbank det. R.G. St. 122 1982 F (3)

GH

Elaphoglossum sp. aff. E. engelii (Karst.) Christ Fern fern on steep roadbank det. R.G. Stolze 1982. F 11143 Pernettya prostrata (Cav.) DC. ERICAC diminutive shrub on roadbank fruits reddish purple 11144 F (2) 11145 SAlvia LAI creet hach on roadbank, calyx and oppor SAlvia LABIAT Bartsia INAEQUALIS BENTH. SSP. RUBESCENS SEROPH.

erect herb on roadbank, calyx and upper lip 11145 f (2) of corolla Red, lower corolla lip green DET. U. HOLAU 1987 ETECT PER CLAM.) TREVISAD VAR. REFLEXADA LYCOP. Erect harb on roadbook, in Menty full sundet. R.G. Stolze 982. B. DUCGARDIANY 11146 F (3) F (2) Liabum ferreyrii H. Robinson COMP. Shrub ca. I mater, on road bank , flowers past Pennisetum peruvianum Trin. GRAM. F 11148. usm (3) grass ca. I meter tall along padbank 1982. 11149 Pleurothallus off. cardiostola Rehb.f. ORCHID. Crect herb on roadbank Howers pale F (4) 4517 yellow w/ central, dark red stripe SEL

det. c.H. Dodson 1982.

Pleurothallus 11150 similar to # 11149 Except: flowers pale -(1) reddish brown Oreocallis mucronsto (Willd.) Sleumer s. str. AAU [15] Embothrium det. Sleumer 1982. PROTEAC Duke (2) & Sparsely branched shrub, flowers rose pint in folios Ny ONLY one soon Stems, glan com. Cavendishia punctata (R. + P. ex J. St. Hil. Hoer. ERICAC 11152 f (3) scandent showb ca. 2 meters tall along usm' Fruits green det. J. Luteyn 1983. Cavendishia bracteata (R.+P. ex J. St. Hil.) ERICAC 11153 Scandent shrub ca. 2 meters, on Roadbank Ovary green, corolla tube red w/ palegreen apex det. J. Luteyn 1/83. F(4) Ny ... 11154 Elleanthus Elleanthus ORCHID
erect herb on steep roadbank, Flowers Creamy F(I)Desfontainer L shrub 2 m. tall on steep roadbank corolla tube red, limb yellow, fruits gellow 11155 (5) photo USY-

DEC 6 1981

Fuchsia abrupta Johnston, Plowman & ONABR shrub on roadbank, flowers pendulous + red throughout 11156 Fn (3) Myrica pubescens Willd. MYRIC. shrub ca. 2 m.; inflorescence pole green 11157 F (3) um Bomarea AMARYL.

twining vine among shrubs on roadbank
fruits pole green w/ white pubercence
on upper (apical) surface 11158 F(4) USM GB Piper Ineatifolium Trel. & yunde. PIRER. erect shrub 1.5 m., spikes erect and yellowish brown. det. R. Callejes 1982. 11159 F(3) NY 11160 Pitcairnez Sp. nov.

BROMEL

F (3+3)(4) scape ca. I moter long of fruits green

Growing on steep west det. U.B. Smith 1987.

USM

USM

Growing on steep west det. U.B. Smith 1987.

USM growing on steep west det. C.B. Smith
us.

Alt. 2310 m., 54 km. NE of
Huanuco on road to Tingo
Maria.

1116 Veronica pengrina sup. xalapensis SCROPH
(2) F erect herb in wet Areas on roadside.
USM Fruits pela green.

Passiflora ligularis Juss. PassIFL 11162 F (7) extensive herbaceous vine Among shrubs leaves pole purplish below, shirty green MO above; bracts pale green w/purple veins; fleshy, light green abaxially + greenish white TEX K Adarially sepalo; petals greenish white; corona white and purple bounded det. T. flowmen 183. Pavonia aff. hexaphylla (S. Moore) Krapov. MALVACEAE 11163 herb in waste Area along road, flowerspale f (2) orange det. P. Fryxell 1984 Solanum confine Dunal velaff. SOLAN 11164 F (3) shrub ca. 2-3 meters in streambed of USM quebrada; immofure fruits green

et. M. Nee 1982.11

F-11164A. Solanum aphyodendron Knapp ut. S. Knapp 1985. Solanum appressum Roe SOLAN 11165 F (3) USM L shrub ca. 2-3 meters along quebrada w/#1/164 flowers white, immature thuits green det. M. nee 1982 Bornedesia corymbosa (R. + P.) D. Don COMP. 11166 F-z(3) small tree with spiny trunk and branches USM along quebrada with #'s 11164+11165

flowers past det. M.O.D://on 1982.

Monnina Po unbranched shrub I meter tall; wings purple, Keel yollow 11167 (1) USM Valeriana hirsutissima Killip VALSRIAN. 11168 F.(1) erect herb in shade of trees along quebrada buds cream colored det. P. Matekaitis V. MACBRIDEI KILLIPDET. F.R.BARRIE 1986 Oxalis spiralis R. + P. ex Don OXALID 11169 herb w/ succellent stems (red stems), along quebrada in shade of trees; flowers yellow using the herb in shade of trees along guebrada inflorescence quenish white 11170 F (5) USM MO INPA Peperonia Mortiano Miq. PIPERAK Orect succellent herb on rock in shade of trees 11171 F (3) along quebrada; spikas cream-colored. Piper lineatifolium Trel. + Yunck. PIPER shrub à Imeter in shade of trees along quebrada; spikes cream colored. 11172 f (**3**) USM W det. R. Callejas 1982

Begonia sp. nov.? BEGON 11173 F (3) USM(3) herb 1.5 meters, in shade of trees along quebrada; flowers polopink, fruits brown det. L. B. Smith 1983! Verbascom frirgatum Stokes in With SCROPH 11174 f (3) herb erect on open roadides, up to 1.5 m.; flowers pale yellow w/ purple ring at center (FIRST RECORD FOR PERU) NY CANNA iridiflora R+P CANN. 11175 F(2) rhizomatous herb, ca. 2 meters tall, along waterfall; flowers pendulous, calyx and corolla dark red; staminade tube white w/ red limb. Only one seen Shrub 1.5 meters along open roadside 11176 f (3) stems reddish; spikes erect and Anteriorly 14 curved, cream colored and turning green. det. R. Callejas 1985. CECTOPIA ANDINA CUATREC. MORACE. 11144 tree ca. 10 meters along roadside in (9) photos cloud forest - in feoted with biting ANTS - male plant; /EAUES 9 loked DET. C.C.BERG- 5/8/94 USM 11-3

279

N4-2

DEC 7 1981 Perus Dept. Huanuco. Prov. Leoncus Prado. Tingo Maria. Alt. 680 M. 7 Dec 81. Inga edulis Mart. u.v. paezy det. c. niezgoda 1984 1 3) Cult. tree & m. tall with spreading usm Crown. Colyx + corolla light yellowgreen. Filaments white growing oppo-site post office along street. (35 PERU: Dept. Huenuco. Prov. Lloncio Prado. Distrib Rupa Rupa. Tingo Mariá. DEC 7 Jardin Botanico de Tingo María.

Alt. 680 m. 7 Dec 1981.

Coll. T. Plowman & M. Ramirez R.

11179. Coussapoa ovalifolia Trec.

(6) cm Dirt

Ny

Mo yellow. Fruits red-purple.

Sep Clear. Not planted. Let. C.C. Beg

Mr. "renaco negro" 1982 11/80. Coussapod villosa P. + E. Morac. USM Leeves whitish beneath. Infl. pole green. Sop clear, yellow. F U Stipule dull orange. Lieves ealer by black + orange caterpillan (allected) MO K n. v. rendeo negro. F

Siparuna ASPERA (RIXP.) A. D. Monimiac. n. v. "Imon del monte" USM Treelet 5 m. tall. aromotie. GB Fls. Sleshy, yellow. FR. green, red within DET. S. RENNER & G. HAUSNER 1994 11182. Renealmia nicolaidides Loesener Zingib. F(8) Herb 3 m. 4210 cultivated. U from plant (oliceted at la Divisoria) INPA Pedincle peli gren. Infl. bracts pink turning brown. Chyx pink. Corolle tube white, lokes red. Staminode pele yellow. Also common in Tingo Maria 11183. Bambusz TULDA ROXB. Gram.

F (18) Cult. bembos formine large

USM MO Clumb, 6 M. i diemettr. Culms

Separate K

Green Spikelets green.

Gen dien., modes 57-71 cm long.

DET. X. LONDOSO 1990

Nuctor

Illoy Neld SPRUCEANA HEIMERL. Nyctog.

F (4) Tree 8 m. tell x 20 cm. DBH.

USM Not planted. Fruits dark red;

GB pedicels cornine red. Buds cream

Mo n. v. yanamuco "black "scotion of cane"

DEC 7 1981

Guttif. 11185. Vismia "nv. pichirina" USM (3) Tree 8 m. tall x 15 cm. DBH. FIS. pinkish yellow. Not planted. 11186. Jolanum Solanze. Small tree 6 m. tell cultivated from seeds from plant growing wild in Forest Reserve of university USM BH CORD Nacional Agreria, Tingo Marie. Leves forming rosettes at tips of branches. Infl. pendulous from center of vocatte. (abyx pele green. Corolla flahz, white. Plant 4 years old. 11187. Cleone .. Capperid. , Cult. herb 1.5 m- tell grown from selds from (estillo grande. Psepels & phtale light green.

11188. Clavija POEPPIGII MEZ Throphrest.

fotos. F Ovenge. Not planted. DET. B. STAHL 1989

11189. Tovomitopsis Guttiferze eult. tree 8 m. tall x 15 cm. (6) USM DBH. grown from seeds collected from wild tree from Agyay +12. Fls. pele yellow. FRS. green F-2 with white latex) is red-purple within, aromatic Mo K M. STANNEA (GRISEB.) NIED. W, ANDERSON 1991 11190. Mascagnia benthamiana (Griseb.) Anderson Malpigh. (2) Extensive vine cultivated in Sun. Lus. silvery beneath. Old fruits brown. grown from cutting from Agusy Fis. see Ploumen 5865, det. W.A. Anderson \$7630? det. W.A. Anderson 11191. Cyphomendre PENDULA (R.+P.) SENDTN. Jolenec. Treelet 1.5 m. tall with single USM stem and horizontal brenches in F one plane. I. fl. pendulous from GH older branch exils. Pedunle CORD brownish glu. Colyx pole red-violet Covolla light violet: Peduncle in fruit green Colyx lobels vert violet. Fruit still green. Grown from seed col-lected at La Florida, Rio Huallaga.

Shrub Im. tall. Lys. red purple beneath. Peduncle erect. USM 7=1s. nodding. Petals abaxilly Mo purple, edaxially cream. Antthere pale yellow. 11193 .<u>Clusia</u> Shall tree 7 m. tall. not uso My planted. Buds white. Fls. Fose F K pink. Skus with milky letex. 11194. Ficus paraensis (Mig.) Mig. Morze Tree 10 m. fell x 15 cm. DBH. FRS. olive green with dark FUNY red vertical striple. Hem with White 12tex. det. E. C. Berg 1982. 11195 - Miconia triplinervis R. + P. Melast. Shrub 3 m. fall cultivated (6) from seld collected wild USM in Forest Reserve of Univ. F US 7/20. Agraria de la felva in Tingo Meria. Fls. White. GB.

let. Wurdsch 1982.

11196. Boehmeria Urficac.

USM u green. Not planted. det. c.c. Berg 1982.

F my 11197. Piper divoricatum Meyer Piperac.

USM (5) Tree (et 5 m. to11. Sp. kes Eindufous

F. Ny green-Lvs. Shiny both surfaces.

INPA not planted. det. R. Callejas 1982, 1198. Psychotria carthaginensia Jacq. Rubiac.

USM Ny hot planted.

F INPA hot planted. (b) Tree 8. m. tell. Cultivated USM from seed from wild tree at Castilla grande. Fls. cauliflorous gellow. FRS. Said to be orange, Vound ca. 10 cm. diameter. n.v. guana guana" det. T. plowmen 1982. NY 11200, Ficus caballina Standl. Morac. (3) Tree 12 m. tell x 20 cm. DBH; USM with 1stex. Sterele. Fruit said to be red, ca. I cm. diameter. Not planted det. C.C. Beng 1/82.

Lesieris ligulata Hitche + Chase gram. Scendent gress 2.5 m. tall 1/201. usy (3) Hong fence in secondary growth. MO FRs. black. Not plented ut. G. Davidse 1982 (4) High climbing gosso. Culms
(0 m. to (1. Sterile, not planted.

ut. C. Davidse 1/82 4SH (4) 40 K 11203. Calliandra angustifolia Spruce Ex Lyum. USM (2) Cult-Shrub 2 m. tall grown from Seeds brought from Aguzytia.

F Celyx cream to pinh. Filement
tube white, filements pinh.

N. v. "bobinsana" 11204. Schistocarpha empatorioides (Fengl.) Comp. (3) Weedy Herb 1 m. fall on open bruke.

A Rio Huellege. Fls. yellow, billing. USM F US var. <u>Sessiliflorum</u>
Var. <u>Ses</u> F(2) The vi cocona"
USM Cult. Shrub I m. tall. Fls. pele green. det. M. Mee 1982.

Thrub (m. fall in open area. -1s. White -Cordia bifurcata R. & S. FIs. White hv. "huesca anunilla" det. N. Taroda 1983 1/207. Mascagnia anisopetala (Adr. Juss.) Grisel. Malpigh. U.V. purgahyasca. Liene among Shrubs. Sterle. FIS. said to be hed. grown from FNY Cutting brought from Aguartia. 11208. Crurania spinulosa (Preff. + Endl.) Cogn. Culcurb Extensive perbeccións vine in trees. Fls. overge. Fruits pendulous, green. nv. "z=p>llito del monte!" Ny Fruits edible when ripe Sweet, yellow. det. C. Jeffrey 1983. Mul 1209 Urera caracasana (Jacq.) Griseb. Usticac.

Way 6) Weak Tel 8 cm. tall x 10 cm.

Weak Telestacks fleshy, pake brown.

To we is hango siù espina. 11209A. Snails

DEC 8 1981 8 Dec 1981. Jardi Botanico de Tingo Maria. = ALBIZIA SAMAN (JACQ.) F. V. MUELL.
11210. Samanea saman (Jacq.) Merrill Ly. (6) Tree 10 m. to(1. Calyx yellow. USM K green. Corolla cream. Filamento F MO Cream in basal 4, red in apical NY 3/4. Not planted. n. v. "lliucho v ainilla".

det C. Nieggoda 1984, L. RICO 1989 (3) Treelet 3.5 m. fell, grown usM From seed collected et Castillo F-2 Igoende. Petals light brownish green, Enthers cream turning brown. notes n. v. "chupo sacha": fruit eaten Lesf crushed with water and 11212 Solanum miteR.+P. K F green, getals reflexed. Authers
yellow. set. M. Nee 1982. Herb Im- tall. Covolla pele 11213. Muntingis colobura L. Titioc. Tree 15 m. fall x 25 cm dieme-U to .. Fls. cream. Fruit red.

n.v. yumanasa" A.FLORIBUNDUS (P. & E.) RADLK. G.S. PENDINGTON]

FLORIBUNDUS (P. & E.) RADLK. SAPIND.

PET. R. E. GEREAU 1988

Tree 6 m - tall. FRS. yellow.

Malvaviscus penduliflorus DC. Malvaviscus penduliflorus DC.

11215. Hibiscus *apparently a white-flowered mutant Malvax. usy Cuet shrub 2 in-tall. Fls. white.

det. P. Fryxell 1984

Wenisplan.

Wish (2) Viai in thicket. Fls. yellow green. 11217. Rottboellia exaltata L.f. Grew. Grew. Grew. Grew. Lan vive bruk in open Mo seen. det. G. Davidse 1982 11218. Eryngium foetidum L. Umbell

(2) Cultivated avouration herb.

F. n.v. "sacha culantro" - used as

KNG culinary herb. 11219. Crinum?

(3) Cult. Bulbouis herb with short pseudousm stem 8 cm tall, plant 1 m. tall.

F Fls. white throughout. H220

11220. Heliconia zebrina Plowman, Kress + Kennedy
(4) Iterb 1 m. fall. Cultivated

WM from plants collected at JaF-2 cintillo. Leaf bases purplish

brown. Upper leaf surface

Velvety with alternating dark

green kind light yellow green bands.

Midrib light yellow green. Lower

leaf surface red-purple, dull.

Peduncle and branch broots red
dish orange. Pedicel and ovary

light green.

(2) N. v. berros "

(2) N. v. berros "

(3) Cult. herb. F/s. cream.

(4) use: leeves are wilted with boiling water, then fried with

lard and eggs- laten.

Peru: Dept. Huanuco. Prov. Huánuco. Corpish Pess. 46.8 km. NE of Husnuco On road to Tingo Maria. Alt. 2490m. 6 Dec 181. Coll. T. Plowman and P.M. Rury. 1122. Stereocaulon camulosum Rauschel Licheus F (1) Lichen on stelp open roadbank. det. Reformis 1887. 1/223. Liverwart on steep wet open road bank. B Hepaticae F (3) 1/224. Pertigers lacionata (Merr. ex Roble) Expellik perstical

F(1) tiverwort on steep wet open roadbank. det. R.C. Harris 1987. Breutelia chrysea ((. Müll.) Jaeg. Musei Moss on steep wet open roadbank. 11225. F (5) det. W. C. Steere 1984
Hepsticae
Liverwort or Steep wet open Roadbank. 11226 F (3) 1/227. <u>Polytrichum juniperinum</u> Hedw. Musci F (1) Cushion moss on steep wet open rozdbenk. det. W. C. Steere 1984 11228. F(3) Cushion moss on steep wet open vordbank.

DEC 6 1981	
11 Z 29.	Hersticae. Lesty liverwort on steep wetopen roadbank.
1/230. F (1) DEC 7 1981	Prodo. Jerdin Botanico de Tingo Maria. Tingo Maria. Alt. 880 L.
F(2)	Brigmensi: Versicolor Lagerh. Cult. treelet 3 m. tall. Flo. completely pendulous, pure White, fragrant in the evening. Corolle teeth recurving 360. Anthers connivent.
	4

Rery: Dept. Huznaco. Prov. Leoncio Prodo Date + Locality same as 11233 det. D. Stephenson 1983. 11232. Zamia poeppigiona Mart. + Eichl. in Mart. (15) massive cycod with trunk 1.8 m. toll x 25 cm. dismeter. Trunk light brown. Lus. about 12.15. Petiale evened, 85 cm. long. Lf. blade 2 m. long with 49 pairs if les flets. Come solitary from upper les faxil, pendulous; pedun ele 18 cm long x 6 cm. diame for Come 55 cm long x 15 cm. dia-

meter. Megespor. phylls 30 per vertical row, reddish brown.

860

photos

USM

1-3 NY-2 K

MO-- 2

134

TNPA US-2

LA FTG

PERU: Dept. HUANUCO: PROV. LEOPCIO Prado. Tingo Maria. Steep hillsides apposite Airport 700-780 meters. 9 Dec 1981. Coll. T. Phuman, M. Romirez R. & P. M. Rury. Cryptochloa unispiculata Soderstram GRAMIN. 11233 (A) USM grass growing in small clumps det. JG. Davidse 1988. 11234 Xylobium squalens (Lind). Lindl. ORCHID (1) epiphytic orchid on tree limb; Inflorescence pendulous, peduncle dull reddish purple, perianth cream w/ purple tinge; column basally white purple black at Apex. Let TP. 1982. HULAZANTHE hexantha (P. YE.) Jonk. + Jonk. MARANT. 11235 herb 40 cm. fall in forest understorey (2) USM

brack green, calyx hyaline, corolla and staninodes pale yellow Let. T. Plowman 1982. 11236 CALATHEA MARANT. herb on limestone rocks, leaves green above wy slight lustre, dull red-purple beneath; reduncte + petioles dark red purple, bracts green, calyx green corolla + staminodes white, capsule (2) USM greenish-white Banta 11236A Caladium Terrestrial herb novoucher

11237 CAlathea terrestrial herb in understorey; periole and (2) teal sheather purplish-brown; pulvinus light brown, leaf blade dark green above and somewhat shiny, dull pale glaucous green beneath; poduncle light green to reddish, fertile bracts pale green, sterile bracts light green callyx and corolla creamy white, staminodes purple. USM

Fittonia albivenis (Kindley ex Veitch) Brummitt GESNERIA 11238 trailing herb of forest understorey; leaves dark, sking green with white veins; flowers pale yellow. (2) usm F

Piper reticulatum L. PIPERAC. Freelet 3 m. tall, leaves papyraceus, spikes erect + green. det. N. Callejas 1982. (2) uson 11240

Olyra latifolia L. GRAMIN. scandent grass 2 m. tall i spikelets pale green det. G. Pavidae 1982 (3) using Mo 11241

Pseudechinolaena polystachza (H.B.K.) Stapf Commet.

trailing herb wi erect inflorescences growing at edge of chacra, fruits green.

det. M. Nee 1982. (2) USM

11239

DEC 9 1981 Cysthula achyranthoides (HBK.) Moquin Alternanthera det. J.A. Meors 1/82. AMARANTH. 11242 herb along trail in the forest, Plowers (3) USM F 17H pale green succelent herb along trail in forest, flowers white 11243 (2) usm 11244 shrub ca. I meter tall in forest understorey; flowers white and on tips of lower (3)USM

Philodendron fibrillosum Poeppig ARACEAE
Climbing vine on free trunk; pedurele
light green, Spathe white.

(NEW to PERU)
Cleidion woodsonianum Croizat EUPHORB.

tree 6 m. fall; fruits pendulous, green.
Let. M. H. Hufft 1982. 11245 (1) F USM 11246 (4) USM DAV K

Pavonia fruticosa (Miller) Fawcett & Rendle MALVAC.

det. P. Fryxell 1984 Bit.

low, unbranched shrub along trail in forest;

Mo

11247

(2) F

branches

Lycianthes of amotitionensis (Coult + Pom. Sm) SOLANAS 11248 (3) 45M erect, Arching herb to I nater tall; fruits seed a MO FMO bright red at maturity. dt. D'Ary 1983

caly x green, corolla white.

Baukinin det. C. Niezgoda 1982 LEGUM. 11249 F woody liana of forest; fruits pendulous and dark purple. (7) USM Mo winderli Erythroxylum fimbriatum Pergr. ERYTHRUX 11250 (15) treelet ca. 3 meters tall on steep slope of hillside in forest understorey. Trunk photos wood ca. I inch diameter at base with two USM major axes above; branches mostly plagiotropic, with few orthotropic short FGON-Z shoots and suckers from trint. Leaves MO covered with lichens and liverworts on upper surface. Sterile. Voucher for transpiration INPA w us data and wood sample (wood from smaller CR of 2 major axes). Transpiration data taken from tagged branches - leaves monitored + collected separately in individual Envelopes. Tusticia sp. ACANTH.
herb w/ decumbent stems rooting at the 11251 (3) nodes; leaves shimy, purple-black above and deep purple beneath. Sterile. Vovcher for live material. Let D. Wasshamer 1/82 110c -> LyON USM ins the PileA QUSHIENSIS KILLIP. N. HEDSOLD 2000 URTIC. herb on large boulder; ferminal flowers pale green; producing numerous stoloniferous, flowering branche 黑11252 MO (10)

at base with erect inflorescences,

Flowering stolows purple, with white

Flowers. Terminol flowers of stolowiserus flurs.?

11253 Coccocopselum Bychotria emetica L.f. RUBIAC.

[2) Therb 60 cm. tall; mature fruits sky blue erect det. P. Matekaitis 1982

[3) Tebrina pendula Schnizl. Commel.

(3) Trailing herb in forest; leaves variegated, and dark green with pair of silvery stripes.

US dark purple beneath; not cultivated; Flowers pink.

Dizetema RACEMIFERUM BENTH.

Dizetema RACEMIFERUM BENTH.

Episcia L.E. SKOG (US) 2001 GESNER.

Flowers pink.

Dizetem? RACEMIFERUM BENTH.

Episcia L.E. SKOG (US) 2001 GESNER.

(2)(3) rosulate herb on steep slopes; leaves light

USM. green throughout; peduncle dark red
Forple throughout; Calyx pale green,

corolla tube white we violet (bless and

white throat.

Dizstem?

Episcia

GESNER

(3) rosulate herb on steep slopes; leaves

USM purplish-green above and red-purple below;

pedoncle dark red-purple throughout, calyx

creamy white wy purple lokes, corolla

tube white wy pale blue violet lokes,

throat white with dark purple spot at base of each lobe.

11257 Anthurium

Nert on vertical limestone

Nivertyon (liffs. Lezves pendulous, shing.

Volument of K Peduncle, spethe + spedix pelegran.

11258 Anthurium corellinum Poepp.

F (2) Hert on limestone rock outcrop voule in forest. Lus. shing, both sides.

11259.

11259.

Brown fungus on fellen rotting

F log in forest.

[1] Delicete erect fungus on leaf litter in forest. "Brench tips" white.

11261.

(1) Erect fungus on vollen log in hillside forest. Es Lower helf dark brown.

Hpicel helf white.

DEC 9 1981

Jardin Botznico de Tingo Maria 11t. 680 m. 9 Dec 1981. Coll. T. Plowmen + M. Remirez R. 11262. Colathea inocephala Marent. (2) (ult. herb. Lvs. with dark give USM Stripe et midrib. Brocks yellowish F brown- FIS- pe le yellow. From Cestillo Grande n.v. bijeo pintado USM (2) Liana 10 ca. tall, not culti-MO +3 Vated. Fls. pale yellow let. A. Gentry Seed: Lyon ARB. 1982. 11264 Celtis ignones (Jecg.) Sarg. Ulmac. anmostreelet 5 m. tall, not pultivale. fotos

FRS. green.

USM

ase: Factor orange. applied on piece

of cotton to bad tooth to extrect

it. Tooth comes apart in pieces.

face to apply 6 times a day for one

month. this firm more: 11765. Mescagnia merophylla Rusby Malpigh. USM Buds cream. In habited by auto. det. TOVFID W. A. Anderson 1985.

MICH

Motisio cordata
Theretia peruviena
Theobroma cacao
Pourouma cerrofii folia
Ormosia Sp.
Cassio ruiziano
Ochroma lagopus

11266. Triplaris Polygonac.

F (2) Tree 8 m. tall in habited by
usm fierce biting outs. Stipule yellowish
green. Old infl. brown.

11267. Coryodendron ormocense Karst. Eughorb.

F(2) n.v. "moena mulata"

USM Tree 18 m. tall × 18 cm DDH.

Back Shiny blackish brown, exfoliating in patches showing light quei

best beneath. Fruit said to be 4 valued, collected from ground.

11268. Cestrum recemosum R.+P. Solonee. F(2) Tree 18 m. tall x 20 cm BH; USM Fls. on long terminal inflorences,

younger tree.
The viocuers blenco"

11269 Dussia TESSMADNII HARMS Legum.

F (2) 2. v. chonto quiro
USM Tree 20 in tall x 25 in DBH.
Frs. orenge, collected beneath

fruits. DET. C. H. STIRTON 1988

11270. Batocarpus amazonicus (Ducke) Fosberg Morae. (3) Tree 20 m. tall with white latex. 1 the formal beneath tree.

The "leche cospi" det. c. C. Berg 1/82. 11271. Engthroxylum coca Lam. Engthr.
(5) Plant 1: Transpiration data vorwher.

f Jhrub 2.5 m. tall cultivated in Shadl

ELON-2 of Ochroma pyramidale. Fls. creamy

fotos relite. FRS. Miny red. 11272. Engthroxylum coco Lam. Engths. F (6) Plant 2: Transpiration data youcher

ELON-2 Shrub 2 m-tall cultivated in shade
of Ochroma pyramidale. Fla-creamy

White . FRs. Shing red. fotos

11273. Schrobbium Crysophyllum P. + E. Legum.

(5) Tree 15 m. to 11 x 20 cm. DBH.

USM young fruits green. Planted from US-2 Seed brought from Aucey ecun

eo (lected from wild tree. 8 years.

Old.

M.v. "huziruru."

det. c. nieggoda 1983.

11274. Mouris surveolens Poepp. Anacard. MO K Not planted. Buds creamy white.
Twigs, petiole + rechie red.
det-E. Renterio-Arreage 1983. (2) NECTANDRA RETICULATA (RIJPI) HEZ LOURSC.

(2) N. V. MORNO DET. J. ROHWER 1989 F (2) Tree 12 m. fell x 15 cm DBIt. USM young fruits green. 1001 PERU: Dut Huinuco, Prv. Leonico Prodo.
1511 Hillside opposite airport. Tingo Maria
1611 Too-780 m. 9000 1981. R. DEC ? 1/276. Tynanthus polyanthus (Bur.) Sandu. Bignon. F(4) Lizna in hillside forest. USM K Fls. white. n. v. clavohussed." let. A. Gentry 1982. Erythroxylum ulei OESchulz ERYTH. small understorey tree ca. 3-4 meters tall 11277 (6) with a 1.5" diameter bole and four Wood major axes diverging ca. Ift from soil. located on steep slope immediately below USM F W large lines towe boulders. Wood and TRANSPIRATION Voucher. STERILE. * Coll. T. Plowmen, M. Ramirez R. L P. M. Rurg.

<u>Erythroxylum ulei</u> O.E. Schulz ERYTHROX. 11278 (5) small, understorey treeled ca. 25 meters tall and sparsely branched with single trunk ca. 1/2" diameter and predominantly wood F playiotropic branches. Habitat identical to ECON-2 U # 11277 and also located immediately below large, linestone boulders. Wood and Transpiration Voucher. Sterile.

> Peru: Pept. Huinuco. Prov. Leoncio Predo. Tingo Maria. Jerdia Botznico de Tingo Merie. Alt. 680 m. 10 Dec 1981. coll. T. Plowmen and M. Remirez R.

11279. <u>Piper Callosum</u> R. +P.

F (3) Lou shrub. Spikes green. Lus. shing
usm

sbove. nv. "guzyusa" det. R. (allejas 1982.

11280. Genipe americana L. Rubloc Tree 20 m. tall x 20 cm. DBH. F (3) Corolla creamy white, with yellow USM

at throat, turning yellow. n. v. huito, fruits used as black eye.

"jaguo" I green fruits are boiled with
water. Used to dye the
heir, paint the body & dying fixers.

GB

fotos

Mucuna 11281. Hubaceous vine in thicket. Petalo dep purple. Filoments tube Cream FRS. green. Not planted. N.v. "pollores". (2) F2 usm F (2) MU. MUENE PAGE NEES (H.B.K.) LOUNDE. Tree 15 cm. tell X 25 cm DBH. FRS. Shing, brown. not planted. 11283. (zyzponia glandulosa (Beyp. + Endl.) logn Cucuttbr F (5) NY Werboccous vine in Lencerow USM INPA 1=15. yellow green: det. C. Jeffrey 1/83. Tingo Maria. Mercado Modelo. "Central market" 10 Dec 81 11 284. Embothrium det. H. Sleumer 1982. Protese N. v. picahuey blanco: Herb consisting of flowering F (2) usm tops of shrub collected in "tierra frizo": Stemo + petioles rusty red. Fls. creamy white throughout. throughout. Mediainal. Taken for inflammation of the ovaries.

Prosopis strombulifera (lem) Benth. Legum. n.v. "suerte de Morgarita" Yellow fruits sold as good luck charms. Native to Argentina," 11286. Allium ampeloprasum L. Ampeloprasum Group

(3) "ajo macho" Ingle cloved garlic sold as medi-cine. grated and taken in banos for a variety of ills. (= 13032) live F hub.: F BH (3) n.v. puro puro" Floro each.

PERU: Dept. HUANUCO: Prov. Leoncio Prado. NY-2 3 km S.E. of Pucayacu, on road from GB

Tingo Maria to Tocache Nuevo. 11 Dec 1981 (ca. 75 km No of Tingo Maria) Coll. T. Plowmen and P.M. Rury. Cyperus giganteus Vall CYPER. 11288

(20) Parb ca. 2.5 meters tall in low lying,
USM open, aquaje swamp, forming pure
F-2 stand.

JE stander Roxb. bt. Keyamo
128 A. Eleocharis fistulosa (Poir.) Link. Cypenac. USM

(4)

In swamp under Cyperus granteus

PERU: Dept. SAN MArtin: Prov. Mariscal CACETES. 24 KM NW of PUCAYACU ON road from Tingo Maria to Tocache, Alt. 545M (ca. 101 km New of Tingo Maria) 11 Dec 1981. Coll. T. Flowment + P. M. Rusy Bomaria dolichocorpa Killip AMARYL. 11289 (4) F roadbank, Inflorescence ca. 50 cm Seed USM AIF GB Selby 8200 NY Lyon Banta long and pendulous from tree; valves of fruit red-purple and recurring to revert bright red, fleshy seeds. Inflorescence terminal w/ 8 branches. 1066. det. T. Ploumen 1984. DEC 1 1 1981 YERU: Dept. SAN MARTIN: Prov. Mariscal CACETES. 160 Km NW of Tingo Maria on of Tocache, 15 km. south 11 DEC. 1981 FARMER Subsp. capitata Var. capitata RUBIA. 11290 Mosmall tree 5 m. tall in moist hillside forest (6) a immature fruits deep purple det. P. Matekaitis 1983 USM Clibration Tehthyothere (P. 42.) Baker Comp. 11291 weak shrub 1.5 m. tall on moist, open road F(3) USM USM bank; flowers white. det. M.O. Dillon 1982. Piper augustum Rudge PIPERK 11292 weak treelet 3 m. tall on steep (4) F USM NY wot hillside in forest; Inflorescences pendulous, dark green, red-purple peduncle

Capitatus Drake det. B. Stein (88. macrophyllus (6. Don) Wimm.

11293 Centropogon Aggregatus LOBEL

(2) Fherb 60 cm tall in understorey of wet,

sed USM hillside forest. Bracts + Fruits green.

Latex white, turning orange.

det. P. Matekaitis 1983 Kanthosoma stenospathum Madison ARAC.

(2) erect, terrestrial herb in wet hillside · F Mo forest. Peduncle pale green; female part of spathe olive green w/ dark purple

11294

splotches, apical portion palegreen; spadix creamy white. Lt. T. plowman 1982. 11ve: SEL: 82-556

11295 Anthurium terrestrial herb ca. I meter tall on steep hillside in wet forest. Spathe and (2+1) F MO spadix pole green. Prophylls, peduncles and petioles reddish purple, especially towards

(2) erect herb in wet hillside forest, 80 cm.

tall, buds fleshy and orange let. L. Stog 1985.

Psychotris pongo and Stand! 182. RUBIAC shrub to 3 m. tall, rachis and pedurcle used my green, bracks dark purple, corolla white, Fruits dark blue purple. (wet hillside forest)

SArAviA biserrato (R.+P.) Spreng. DILLEN. 11298 F(2) shrub 3 m. tall in clearing in hillside forest. Petals white stamens yellow. det. D.D. Soejer to 1982 usm Dieffenbachia
herb to 2 m. tall in steep hillside forest 11299 (3) live s you Spathe green, exposed part of spadix flesh colored. Latex milky, sap with odor of skunk. Seedlings w/ leaves dark green USM F-2 K wi centraly white stripe (not collected). Pitca I rni A coralling Linden + André Bromal 11300 terrestrial harts forming clumps on (3) live > SEL steep slopes in understorey of wety hillside forest. Infructes duce USM basal, pendulous reduncte and rachis Fus reddish green, padicels recurved.
Sepals greenish purple, fruits greenish
purple. Only one plant seen fertile.

det. L.B. Sm. H. 1984. SolANUM nemorense Dunal SOLAN 11301 Armad shrub 60 cm. tally margin of hillside forest. Flowers pendolous, (5) usm F. petals light green. det. m. nee 1982.

CAPPAR.

CAPPAR.

Treelet 4 m. tall in hilltop forest;

fruits pendulous, dark reddish-purple.

Fruits up to ca. 6 cm long. 11302 (3) USM Mo (3) low shrub to 70 cm. tall in wet, hillside forest. Pedicel, peduncle and leaf underside reddish purple. Corolla white, USM + K immature fruits green.

det. P. Matekaitis 1983

SOLAN

SOLAN (2) erect herb with trailing stem rooting USM at the nodes, an wet hitside in forest. Flowers pale green, Anthers yellow. (2) erect herb at forest margin on moist roadbank, ca. I meter tall, petals cream immature fruits green USM (4) small tree 6 m. tall, d.b.h. 5 cm.
15M flower buds greenish yellow. USM MO

11307 Ksychotria racemosa (Aubl.) Willd. RUBIAC (3) USM K shrub ca. 2 m. tall in hillside forest. Immature fruits shipy green. det. P. Matekaitis 1983 Tococa quadrialata (Naud.) Macbride MELASTOM 11308 (6) creat herb ca 1.5 meters tall, with USM & trailing stem rooting at the worlds.

For Petals pole pink; I cally boundly pole green, Apically rose. HNthurium crostii Madison ARAC 11309 (2) terrestrial harb on steep slope in forcests USM. ACAUleocent. Petiole and peduncle F terete; Spathe reflexed and green, spadix brown. Immature fruits reddish purple det. T. Crost 1982. Homalomena ARAC. herb to 1.2 m. tall forming large HOMALOMENA 11310 (10) clumps on not roadbank at forest F margin. Infructescences pendulous at base of plant. Spathe remnants reddish purple; immature fruits reddish, white within. SEL MO K USF u (cf.#11640A)

Hepatic. leafy liverwort growing on tree trunks and on dead branches in wet, hillside forest. 1311 (3) (1) Herb 60 cm. in wet hillside F forest. corolla orruge. PERU: Dept. SAN MArtin: Prov. Mariscal CACETES. Distrito Tocache Nuevo. 10 leur west Puente Palo Blanco, Rio Toxache, Altitude 550-650 meters. 12 December 1981. Somewhat disturbed primary forest on steep hillsides. J. Schunke V. + P.M. Rury. 11313 MONOTAGMA SPATHULATUM HAGBERG MARANT. (3) Ferect herb in forest, calyx and corolla line usy pale green, bracks green, staminodes white. 11314 Micrandra siphonoides Benth. EUPHORB. (2) usy tree ca. 30 meters tall, 50 cm. d.b.h., FRS. For buttresses to I neter tall, abundant milky latex. Leaves and fruits collected from ground beneath tree. n.v. "higrilla caspi" det. M. J Haft 1982.

11318

1315 F Erythroxylum macrocnemium Mart. ERYTH.
(12) GH unbranched treelet 4 meters tall in photo of Sorest understorey, stem diameter wood K2 ca. 1.5 cm. Stiputes green and turning fls.(A) reddish brown, caducous. Pedicel cream, Analysis calyx yellow w white margins, petals?

pole orange. Bark smooth, white, with

longitudinal lenticels and algal patches

11315A. szne-secons plant. 11316 basidiony cete on rotton branch of forest floor; pale brown Above, dark brown be weath. (1)Fungi 11317 erect, branched fungus on fallen log, thallus black with white tips. (1) F

Fungi erect fungus on fallen log in forest, " thallus off white, black within. (1) F Tococa quadrialata (Noud.) Macbr. 11319

shrub I mater tall; cally pale green, petals white w/ pink tinge, filaments and style white, anothers pale yellow, ovary turning pink then purple black. (3) seed-fla ush F us aut plant

Live > byon

11320 Monotagma angustissimum Loes. MARANT. (13) herb up to 2 meters tall, forming large photo clumps in cleared area on hilltop.

ATK Leaves medium green and somewhat shiny
seed type above; dull pale green below; w/ yellow
live see midrib. Peduwcle olive green, rachis pale orange. USM Ny bracks carmine-red with white tips. F NY CATY pale pink, corolla white, staminodes the white, callose staminode who we pink spot.

Fruits yellow - spident 2 beetles

1321A. Insects - spident 2 beetles

Fungi (1) F metallic blue mushroom (basidionycete) with brown coloration on top of CAP 11322 yellow, fleshy petals - flowers collected from forest floor, beneath tree ca. 16 meters, 30 cm. doh with fibrous, (A) (F) stringy bark. 1/322A Clusia Bryoph. 11323. bryophytes and lichens on bark of # 11322 F (2) CYPERAC. Hypolytrum longifolium 1324 USM (2) I meter tall on steep bank above trail det. D. Adams 1983. Piper metallice? 11324A

11325

USM F NY UB G treelet 3 m. tall, immature fruits green det. P. Matekaitis 1983 Cophaclis affinis Standl. Psychotra sp. / Cephaelis dolichophylla StandRuBIAC. 11326 F (4) tredet 4 m. tall; Inflorescence erect, USH peduncle dark green, bracts reddish-purple, corollat white. Let. P. Matekaitis 1983 NY 11327 Psychotria trichocephala Poepp. ¿ Endl. RUBIAC. (5) LISM shrub to I meter tall; Bracks dark, red purple, ripe fruits sky-blue.

det. C. HomiHorigez Moieta quianenses Aublet var. quianenis MELASTOM 11328F seed us shrub I meter tall, immature fruits red.

Meture fruits not seen. = not entplut. 11329 Heliconia chartacea Lane ex Barrieros MUSAC. (12) Erect herb up to 5 meters w/ 2-3 stalks. Afflurs. Reticles 39-48 cm, Blades 118-120 cm. Blades transversely split along voins into numerous segments. Sheath, petiale and midrib slightly prvinose. Peduncle dark red-purple, inflorescence pendulous wy dark red rachio and spiral bracks. 115M F-5 GB-5 A DUKE Bracts dark red w/ hybline pale green margin and prvinose. First bract is sterile - bracks inhabited by ANTS.

Joosia dichotoma (R. P.) Karsten Rubiac.

Redicel, overy cream colored; perianth cream at base and yellow green apically. Immature fruits cream colored.

11330 Miconia cuneata Triana ex Cogn. MELASTOM (3)(5)

treelet 4 meters tall; Inflorence axis deep purple, branches reddish purple, fruits blue violet, black at maturity. Wurdsch.

det Tryon 186.

Trichipteris pilosissima (Baker) Barr. Fern usm us F mo

11331 (12)

tree fern ca. 3 meters tall, trunk ca. 4 cm. USM.

d.b.h. Frond ca. 222 cm long with up to 9 pinnately compound pinnae per side of rachis. Pinnules pinnately dissected. Fertile fronds very britle. det. R.G. Stolze 1982. F-3 108E NY GH-2 AAU

Myrcia bractesta (Rich.) DC. MYRTAC.

USM Mo flowers white fruits blue-black.

det. U. Landrum 1982.

Eschweilera sp. LECYTHD fruits collected on ground in foreston ridgetsp. Let. Mari 1982. 11333 Ny (3)

11334 bryoghytes on leaves of Erythroxylum macrocnemium, # 11315 (ibid). (6)

F

11335 bryophyte forming carpet on Jallan log (4) F bryophyte forming carpet on fallen loy (some log as # 1835) 11336 (2) F Leucobryum martianum (Hornsch.) Hampe i Micropterygium trachyphyllum Reimers Musei 11337 (2) F on same log as # & 11335 + 11336 det. W.C. Steere 1984 Marasmiellus helminthocystis Singer Fungi 11338 6 (1) F delicate white mushroom or rotting stem on forest floor det. R. Singer 1782. Tetrorchidium macrophyllum M. Arg. EUPHORB. 11339 (9) tree 7 meters, Abundant white latex in K IDIN INPA F.2 Ny MO DAV trunk, truits green w/ bright red seeds d.b.h. ca. 6 cm Flowers greenish yellow. Let. M. J.Huft 1982. Premish yellow. of Eugenio Colyptianthes R. Fos ker 887. MYRTAC. 11340 (4) Ny Shrub ca. 4 meters tall, immature fruits
USM MKH green. det. L. Landrum 1982. 11341 Tococa sp. a MELASTON. (4) Shrub 2.5 meters; Inflorescence rachis useeds FIG dark red, moture fruits purple-black u F US (ant plant) det. Wurdoch 1982.

Schizzeac.

11342 Amaioua guianensis Aubl. RUBIAC.
USM66 Shrub 4 meters, flowers white, sepala
F TUPA yellow green det. P. Matekaitis 1982 Heliconia schumanniana Loes. MELHEAD. 11343 (2) erect herb 2 meters tall in clearing, culms w/ 8-12 leaves. Inflorescence Live > Lyon ox bosal 3/3, red in Apical 1/3.
Pedical yellow or Ange; bosal 2 of overy
white, Apical 1/2 green; perianth
orange. det. L. Anderson 1/32. 11344. Miconia abbreviata Markgraf MELASTOM usm(4) u shrub 3 maters tall; flowers in bud. 11345 Plowmania perforans Faden CommEL. (2) rose the herb on steep banks along fotos relen quebrada in humus. Le Aues dark, fotos velvety green Above midrib white, pale green below. Adventitions Pedurche and bracks greenish-white Bud creamy-white. Let. R. Falen 1982.

11345A. Live > Lyon young ferns

Aphelandra el jacobinioides ACANTI 11346 shrub to Inetertall; Leaves dark. green above, midrib and lateral (3)Ime > Egon nerves white, red-purple beneath. Bracks rose-pink; corolla rose-pink in basal 2, apically white. Fruits green at maturity. USM Anthurium pachylaminum Croat ARAC. 11347 petiole (6) Peduncle eract, dive Lis. green; fruiting spadix pendulous. Let. T. Cost 1986. (5) USM-2 F-3 11348. Clidemia allardii Wurdack MELAST.

(4) F Shrub Im. tall, fruits blue-black.

seeds-FTG

Let. Wurdach 1982. (2) USM Shrub I m. tall, inflorescence pendulous,

Corolla greenish-white. SOLANUM 11349

11349 A. Lourae. 0

11350 Cordin Nodosa L.

(3) Shrub 2 m. tall, mature fruits white.

Seeds FIG N.V. supay-chicara

USM

GB

Shrub to I meter, flowers and bracts white. det. P. Matikaifis 1985. (3) USM-Z Climbing bamboo Ca. 6 neters tall, 11352 usm (3) f us intervolles 50 cm. Sterile. BACTris actinoneura Drude PALM. 11353 palm ca. 3 meters tall w/ spinosa rachis fruits black, inflorescence Axillary and pendulous. Trunk 2 cm. d.b.h. n.v." nejo" det R. Tryon 1986.

Trichipteris nigra (Mart.) Tryon 1986. (5) seeds -> ush. you 11354 Slender tree fern, 3 m. tall, trunk 2 cm. d.b.h. Leaf 1.55 meters, bipinnate, 13 pinnae per side of rachis. Fronds brittle. (12) usm-3 Moss on trunk of large tree 11355 F (3) trunk (# 11314). det. W. C. Steere 1984 Orthostichopsis tetragona (Hedw.) Broth.
On follow trunks in forest.

det. W. C. Steere 1984 E (2) 11357. Besignyc F (1) Fungus on rolling log. Yellow brown throughout

11351

INPA

DEC 1 2 1981 det. M.J. Bolick 1987.

Oenocarpus mapora Karst. sq. mapora 11358. Genocarpus off. bacaba Mart. Palmae

Trunk 14 m. tall x B cm. DBH. (15)

USM-3 Comm sheft dark green so an long. F-5+

Petule 8-10 cm. long. Lf. blade Ny-4 K-2 2 m. long with 75 lesflets per 4-2

side Trunk previously felled during clearing. det. S. glassman 1983. DEC 1 3 1981 13 Dec 1881. Same locality

11359. Hippotis sp. aff. brevipes Spruce
(4) Treelet 5 m. tell x 4 cm. DBH.

FLS @ My Calyx dull red. Corolla cormine punk

USM & Stipules spirally twisted at apex.

MO BTK ERYTHR. 11360. Evythraxylum macrophyllum car.

photos use: wood for crossposius in house construction.

wood Treelet ca. 2.5 meters in forest along primary forest, d.b.h. ca. Loss. Wood USM

F FCON 2 and transpiration voucher. Sterile. U

Lis. somewhat shing, dark green above, MY Stipules reddish brown. Tondersonii Gray Davidu

CEL NY LP, US, WIS, K; ISC, MO &

11361. Drymoria semicordata (Poepp.) Wiehl. Gesner. seed-i Wibon it edge if clearing. bright red.

115M US Fruits pale yellow.

Let. L. Skog 1984. Peru: Dept. San Martin. Prov. Mariscal Coceres. DHo. To cache Nuevo. Road to Shunté, dest of Ris Tocache. 13 Dec 1981. DEC 13 1981 11362. Costrus lasius Loes. Zingiberac (3) Herb 80 cm. tell elong treil in sun. Brecte golden yellow. Fls. golden yellow throughout. 11363. Malachra ruderalis Gürke Maluac. weedy herb 60 cm. fell in oil polin USM (2) plantation- Bracks green. Fls. yellow

1364. Plukenetia loretensis. Ule Euphrob

NY (6) Wiry vine in open thicket. Fls. + frs. green.

USM FRs. 4-lobed, immoture. det. M.J. Huft 1982.

throughout. det. P. Fryxell 1984

FRS. 4-lobed, immstere. det. M.J. Huft 1982.

FT peruvianum det. Fl. Iltis 182

11365. Tripsacum australe Cutler + Anderson s. lat. Gram

65 (18) Tell gress 4 m. tall forming dense USM-5 Stand in WARRY field at edge of oil palm

Pueraria. Spikelets apically green besally red purple: Cultivated? Eugenia EGENSIS DC. MYRT. us M MICH mature fruits green det. L. Lendrum
DET. R. MCVAUGH 1988 1982. 11367 Bsychotria iodotricha Mull. Arg. RUBIAC shrub 2 m. tall w/ Red-purple hairs
usm

everywhere; Bracks green to red-purple,
corolla pure white. 11368 Olyra Coudata Trin. GRAM.

(6) Mo grass 1.5 m. tall forming clumps; Spikelets

USM ISE greenish-white, ripe fruits shiny dark brown

det- G. Davidse 1982

BURSER. 11369 F (5) Mo small tree, 3 m. tall immature fruits light ust green. Passiflora CAULIFLORA HARMS PASSIF. 11370 woody vine climbing on frees in disturbed remnant of primary forest. Flower buds light green DET. L. ESCOBAR 1992 GA F (2) USM

COL

12 1 3 1 1 Gentianac 11370A. Delicate seprophyte in humus. Stew + overy + corolle tubel white. Corolle limb peleviolet. Hirtella gracilipes (Hook.f.) Pronce 11371 KOSAC. (3) tree 6 meters tall, d.b.h. 4 cm.

Jood Vchr. Perianth pale green, filaments basally white,

MY apically blue-purple. det. Gr. T. Prentice

1982. Wood Vchr. Solanum off. microleprodes Bitt. 11372 SOLAN. (5) MO shrub 2m. tall along trail in forest margin. Immature fruits green. W. D'Arry 1986. Miconia nervosa (smith Triana. MELAST. 11373 shrub 1.5 m. tall, rachis reddish-purple; immature fruits red-orange, mature fruits blue-black (not myrme) let. Wundack 182. Bactris simplici from Mert. PALMAS (3) seeds USMFTGUS 11374 Understorey palm 2.5 meters tall. Fruits (3) USM NX green, turning red-orange. det. S. 9 losomen 1983 det. A. Henderson 187. Erythroxylum mucronatum Benth. ERYTH. Small tree ca. 5 meters tall, branched ca. 11375 5 (24) I meder above ground to form 3 branches, -photos diameter below branches ca. 3 cm. -(A) fruits, is Twigs dark, reddish brown; stipules dark TANALYSIS reddish brown; leaves dark, shiny green above seedlings my and shiny light green below. Flowers cream, F-2 moon one branch only. Fruits erect above the con-2 Mu leaves, immature-green. Transpiration Voycler.

F - 11375A. Bufle DEC 1 3 1981
11376A. Syrphid fly
+ other insects Erythroxylum macrocnemium Mart. ERYTH. 11376 (24) unbranched shrub 1.5 meters tall in String green above, pale & green and dull below. Axillary glomerules. Stipules rusty brown and bracks rusty brown. Colyx greenish white, corolla cramy -wood -photos A Howers -Scrits -insects flies et al flies. Wood Transpiration Vox s. USM ECON Engthroxylum: macrophyllum Car. ERYTT) 11377 tree ca. 20 meters in cutouer remaint (10)of primary forest - ca. 10 cm d.b.h. Bark rugose, mottled, dark reddish brown - trunk 150 di Ametric for and -wood -photos -AWALYMS seedlings inbranched for at least 10 meters. USM Wood unitornly cream colored when cut, turning reddish-orange after several F hours with of cream evolved outer ring of FCON ca. 6 mm. Leaves darkgreen + somewhat WLS Shing Above, pale dull glaveous green below. Floral bracks and stipules dark rusty brown abnormal, gall-infested glowers. Usz: wood for cross-bearns in NY TUPA Mo COL house construction nv. shacquma

DEC 1 4 1981 PERU: Dept. San Martin. Prov. Marizeal Ce cere an Distrito Tocche Muevo. Quebrada de Huaquisha right bank of Rio Huallaga. Alt. 500-600 m. Priman forest on flat quound along Oubrada. 14 Dec 1981. Coll. Tourman J. Schunkev. + Inga edulis Mert. 11378 Inga edulis Mert. Tree & m. tall x 15 cm DBH k cult? in pesture: Fruits suberect, seeds USM WO INPA then pendulous, yellow-brown et maturity. Ani white, sweet, edible. n.v. quijno stimbillo det. C. Mezgode 1984. Spathiphyllum 11379 herb on rocky stream banks. Spathe Abaxially green wy white margins, adaxially white, spadix cream. (5) USM MO u

DEC 1 4 1981 Hegiphila haughtii Mold. dat. R. Foster 1987. Cterodendron tessmennii Motol. Aegiphila 11380 (5) Ny treelet 3 m. tall w/ pendulous
USM K inflorescence and reddish purple carryx.

Immature fruit green.

det. w. Alverson 1987

11381 M Quararibea of wiffii K. Echum. + E. Ulbr. Bomba. (15) usy tree ca. 20 meters tall, trunk 15 cm wood and d.b.h. Fruiting calyx basally yellow-Pruit was orange, apically green, rise fruit seeds 400 bright orange. Phloem rays dilated.

n. 12 50ch = sapotillo" 11382 RANDIA armata (Sw.) DC. RUBIAC.

F (3) Armed shrub 2.5 m. tall Wy pendulous,

green Fruits - fruits wy pale brown dots

det. P. Matekaitis 782 Cryptochloa
grass growing in small charps on forest floor.
spikelits green. 11383 F(4) Colyptronthes plicate me Vough MYRTAC. 11384 treelet 2.5 m. in forest understorey. Inflorescence carliflorous, buds light brown. Leaves aromatic F(5)USM MICH det. L. Landrum 1/82.

Clavija TARAPOTANA MEZ THEOPHRAST. unbranched treelet 2.5 meters fall; 11385 F(2) 45M fruits caviflorous, greenish yellow when unripe. DET. B. STAHL 1989 11386 Cleome longipes Lamb. ex DC. CAPPAR. F(8) K USM GB NY INPA WIS LA spawling, armed liana in open thicket along small stream. Sepals and petals green; anthers mustard yellow. let. Tolowman 1982. 11387 Basistemon Klugii K. Barringer Sp. nov. LOGANS F(10) GH Shrub to 0.5 meter growing under USM INPA fruit trees in open pasture. Corolla white; mature fruit green; 2 sections SAPIUM peruvianum (Machr.) Jabl. EUPHORB. 11388 (8) INA tree 7 m. tall wy storied branches, trunk 8 cm d.b.h. Flowers yellowish USM GH green fruits green. White latex.

n. v. "gutto percho".

Let-M-J. Huft 182. perture

Pochystechys luteo Nees

Slender Shrub on river bank, brack 11389 (3) yellow-orange, corolla white. FUS Let. D. Wasshausen 1982. USM? K

DEC 1 1 1991

LYCIANTHES INAEQUILATER (RUSBY) BITTER SOLAN 11390 (4) Shrub Im. tall in forest understorey. Petals cream, Anthers bright yellow-orange DET. M. NEE 1990 USH Mo K Oxalis ortgiesii Regel 11391 herb on forest floor; stems succulent and reddish-purple. Flowers yellow. F(3) P USM Anthurium brevipedunculatum Madison ARAC. 11392 (3)climbing herb on small treetrunk with Adventitions roots completely excircling the trunk horizontally. Fruiting spathe live: USM Fo dark purple, fruits relidish-purple! Casearia fasciculata (R.+P.) Sleumer 1982. 11393 (12) tree ca. 20 m. tall, trunk 18 cm. d.b.h. fruits separate Leaves dark, shing green above and shiny, light-green below. Fruits carliflorous USM GH on the larger branches, green. Fruits spherical up to 8 cm diameter. M. V. "chepche" edible kuits. 11394 Eucharis plicata Meerow sp. nov. 197E AMARYL. (6) Line bulbous herb on forest floor forming small bulbs the clumps. Perianth tube and tepals pure fotos FLAS white; Corona pale greenish yellow at HSM ky bose, Apically white.

11395 Solanum grandiflorum Ruiz + Pavon SOLAN. (12) tree 5 m. tall with spreading crown, on fruits superate seed open riverbank. Inflorescence et al. parts with pale brown pubescence. Flowers light blue-violet, Anthers golden-gellow. Fruits spherical, green, up to 5 cm. F-2 in diameter.

n. v. 'sjuca huito'-juice of fruit + pith used
es remedy for "colosidades rojas de la visto". BH CORS Rollinia MUCOSA (JACQUIN) BAILLON ANNON. 11396 (10) Cultivated tree 7 m. tall in pasture; Tepals pale green, yellow at maturity; fruits green; ovate 15 cm long X photos fruits 13 cm. Across, fruits turning golden yellow when ripe. N.V. "ANNONA" (DET. MAASON DESTRA 1988) seeds F-Z U-NY Stenostephanus thyrsoides Lindau ACANTH. subshrub Im. tall in primary forest. Flowers light red-violet. det. D. Washensen A. PILOSA H.B.K. DET. F. CONZALEZ 1990 photos 11398 Hristolochia truncata Field & Garden ARISTO. vive in open thicket; inflated part of corolla wellow green, "hood" purple-brown, "lip" dark purple-brown and mottled with (3)USM F K green. det. K. Barringer 1984.

11399

11402 (3)

IGM F Z

Philodendron nervosum (Schult. + Schult.) Kunth ARAC. climbing vine on tree trunk; Spathe basally pale green, distally a creamy white. det. T. (rost 1/82) us (3) Erythroxylum fimbriatum Peyr. ERYTH tree ca. 6 meters with 3 major 11400 (13) branches ca. I meter from ground, bole ca. 10 cm dipmeter below branches book photos Branchlets light tim; leaves shing, dark green above, glavcous dull-green below with distinctive central panely USM Hut FK w/ finer vein reticulum than exmedial COL portions of lamina. Wood and leaf-transpiration voucher. MO u US Tovomitopsis GUTTIF. 11401 USM NY F KO treelet 2.5 meters tall, flowers creamy white, fruits dark red.

> PESCHIEra Justralis (Müll.-Arg.) Miers APOCYN. Shrub 2 m. tall in forest understorey. Immature fruits green. Milky latex. det. M. Fallen 1982. TABERNAEMONTANA VANHUERCKII MUELL. ARb.

TEOPHIS CAUCANA (PITTIER) C.C.BERG11403 Olmedia aspera R. & P. MORAC.

(7) Tree ca. 7 m. tall w/ storied brandes,
seed INFA trunk ca. 6 cm d.b.h. Bracts

45M K green, orange within. Fruits orange,
If Mo green, one-seeded. DET. C.C.BERG 1942

N.V. "Ishanga mascha"

11404 <u>Ruellis</u> forestans Lindau ACANTH.

(2) herb 60 cm tall on forest floor.

photo us Corolla light violet w white eye.

dit. D. Wasshuren 182 ye.

11405 Geogenanthus Op. of. G. poeppigii (Mig.) Folger. COMMEL.

(5) Thizomatous herb w) Ascending stems;

Fination leaves transversely corrugate, with

USM Alternating longitudinal dark and light

For green stripes on either side of midtib.

Flowers produced basally; buds white;

Us fruits cream with dark purple blush.

det. R. Falen 1982.

11406 Philodendron fibrillosum Poeppig ARAC.
(5) Climbing herb on tree trunk; spathe
USM Mo Creamy white.

F SEL Prestoes of ensiformis (A. + P.) H. E. Moore det. glowmon 1883,
11407 n.v. "shueshu" - leaves for thatch, PALM.
(10) single trunk palm 4m. tall, loof 2 m. long
seeds (blade) wi 32 leaflets per side. Inflorescence
- Lyon K. 40N trunk ca. & way up of fruits red orange

Chandradend row tomentosum R. + P. 11408 n.v. ampihusses 10h(15) woody lians & m. high twining houn. 2421. up small branched tree, growing on Inc sendy benk of Quebrada in forest mergin. Bark dark brown, somewhat clema sleds-Lyon rough, Trank 4 cm dismeter, yel-USM lowish when cut. Lus. shing often above, white tomentose beneath rillary truits couli florous on trunk or illary F KAAU the branches, shing desk purple said to be the active curare, form by having yellow not rose 2 Der Merderosian 7 Apr 82 1409. Marenta gob Sp. nov. det. L. Andersson 1983 Herb in forest. Frequent. fotos. Potos. Breets pele green to brownish. live > Lyon, FIG /s. white. Fruits pelegreen. det. L. Andersson 1982. win F GB

14 Dec 1981. (MATISIA AFF. CORDATA HUMB & BONDPY activide 11410. Quararibea stenopetala (Stendl. + Custr.) Bombac. n. v. sacha sapote Ut. B. Alverson 1985. (4) Large tree 30 m. tall X60 cm DBH with seed > Lgon buffresses Im. tell. Fr. lark brown with orange flesh Lus. + fruits from ground some flatened dorsally, 106 cm diam x 5 cm. long. (MATISIA)

11411. Quarariala stenopetala (stand). + Custa.) Bombac fruits -> F Sepling 3 m. tell under 11418. Sterile. det. B. Alverson 1985. (4) 115M hr. sacha sapote" WIS BR Peru: Dept. San Mortin. Prov. Mariscol Caceres, Distrito Tocache nuevo. Tocache nuevo. Miramer, left bank Tocche Nuevo · Coll. T. Plowmen, J. Schunker.

15 Dec 1981.

11412 - Connorus punctatus Planch.

PM. Rury.

Connorus

Potypot Climbing. Shrub 6 u. toll in forest remnant on riverbanh. Fls. yellowish boown, fragrant. det. T. Plowman 1982 11413 Frichitia ALLOPHYLUS PANICULATUS MARISE. Treelet 4 m. fell. FRS. yellow when MO A. DIVARICATUS RADLK. [T.D. PENNINGTON 199 A. DIVARICATUS RADLK. [T.D. PENNINGTON 1994]

DEC 1 5 1981 11414 MICROPHOLIS EGENSIS (A.DC.) PIERRE Sepot. F (4) Tree 12 m. tell on riverbruh FRS. broadly oveld, light green. White 1stex: DET. T.D. PENNINGTON 1987 K NY 1141 S. Byrsonins Melpigh.

Fig (5) - Shrub 3 m. tall is riverine mett k forest. Firs. orange et maturity. 11416 Tragia fallax Muell. Arg. Euphorb. dong riverbruh. Fls. + frs. green. 4. v. shic shic huzsca - Yvs. DAV NY highly irritating on contact Let. M. J. Huft 1982. 11417. Anthurium. ERNESTII ENGL. DET. T. CROAT 1988 usm (2) Epiphyte on treetruch. spathe green, reflexed. Spedix brown. Menisp-11418. Chondrodendron tomentos um R. + P. (15) Woody lians 8 m. toll in forest margin on river bouh. Bo Bakk dark

USM " pith, turning brown. Us. green shing f My Jbre, white tomentose beneath.

GH Fs. buols cream.

n. v. " Impihusses" JerMerdersian 7 APR 82

(6) Au Diffused brenched Small tree wood now 3.5 m. tell, 3 cm. dismeter of base. analysis growing along trail in cut over area.

USM U Sterile. Franspiration voucher.

BEC 1 6 1981.

PERU: Dept. SanMartin. Prov. Mariscal (sceres. 2-4 km. west of To cache on road to Pelo Blanco. 16 Dec 1981. Rosdside thickets and Secondary Forest. Alt. 500-550 m. 11420. Cossio, lucens Vog. Legium. 14) Ny Wesh Lee 4 m. toll. FRs. brown. Usites. When vine in sunny thicket If. underusm Usides + stems reddest purple. Fls. cream.
Fres. Still green. 11422. Cissempelos
(5) Extensive wing Vine in open thicket.
USM KFRS- reddish et meturity'

11423. Ingo edulis Mart. Legum
(8) Ny.2 Cult. tree 6 on. to 11 with spreading
F-2 K2 Crown. Grolla pole green. Filoments

DEC 1 6 1981

USM

white.
nv. "guebe = avil on seed edible.

11424. Phyllanthus

(3) Weed on open wadside. Stems

My reddish. Fre. pele green.

W.

F(2) Enthroxylum coca Lom. Engthrax. 45M Shrub 1 m. tell g voring in 45hs growth.

F 11426. Crofon polonostigmo M. Euphorb.
USM (3) Frequent weedy tree, 4 m. tall.

Immobine fruits pole green,
det. J. Huft 1983.

11427. Periene grass in Shade.

USM (2) Clumbed grass in Shade.

Spikelets gallow. nv. "caricillo" 11428. Bouhinia longicuspis Spruce ex Benth Legum. F (3) Treelet 3 m. ta (1. Lvs. purphist beneath. Perion the purphists brown. Filements pale gree. FRS. brown. Let. C. Nieggoda 1/82.

11429. Guatteria Annonse. (3) Smell tree with 3 trunks. 3 m. tell. Buds gellow-green.

(4) Cult. Vining shrub 2.5 m.

Ky tell in John Chacere.

Ky tell in John Chacere.

Mexy N.V. barbasco" det. C. Nieggoda 1/83. 11431. Pelicourea occidentalis Rubin Fredet 3 m. tall: Jufl. vechis reddish. Frs. black.

det. P. Matekaitis 1982

11432. Psychotria barbiflora A.DC. Rubize.

usy (4) Shrub 1 m. tell in sheke of secondary thicket. Fls. white.

11433 Davilla Kunthii St. Ail. Dilleniac foto USM FRS. orenge. det. P. Motekeitis 1984.

Polo Fas. green.

DEC 1 6 1981

11435. Alternanthera sessilis (L.) R. Br. ex DC. Agreement.

WSM (3) Herb in wet mave in of small

12he. let. J. A. Mears 1982. 12he. Let. J. A. Mears 1982. F 11436. Eleocharis elegans(HBK.) R. + S. Cyperse.

15M (4) Seedal in edge & Small lake.

Forming Lehse clump. 9 del. G. Davidse 182.

11432 Azolla.

Azollae Frosting eque tie in standing water 11438. Monstera dilacerata (Kocht Sello) Koch Arse. 11439. Leticonia schumonniona Loes, Musac (4) Herb in rosette cleup. Lis dul medien FRS. scels gram 2 bone, shing, prumose beauth. Rodins to USM lover 1/3 of brets yellow-orange spices is red.

GB Red, it sellow or vec. parianth yellowU suke hange Downy bestly white spice the green.

11440: Bunchos ia 2 meniaca (Cav.) DC. Melpigh

F-2(5) n.v. circula, china

Cult-trellet 3 m. tall.

folos. K F-1/s. yellow. Frs. red et

maturity. In house yerd in

Tocache.

DEC 1.6 1881 - Bunchosio glandulifero (Jacq.) Albk.

det. W.R. Anderson 1983.

PERU: Dept. San Martin. Prov. Mariscal

pto tocachinuevo. 15 km w. at locale neuro

(aceres. A Cerro Sin sin, V Berio Bamba
marca. & Logged primary forts ton

Steep hillsides above Rio Tocache. Alt.

ca. 550-580 m. 17 Dec 1981.

(4) Shrub Im. tell. Young fruits

From pelige.

Letter of the pelige of the pelige.

Letter of the peligeners of the pel

11442. Ruellið Acouth.

(8) Iterb 80 cm. tell near smell
sud-lrow streem. Lus. rugulose, dærh shing
USM Tex green above dærh reddioh purple
us Ny tæneæth. Corolla pure white. Mæture
AAU (2psules blæch.

(3) Terrestrial rosette herb on sud-cHi steep hillside. Corolla tube white, PMB USM lokes pole violet. DET. L.E.SKOG(US) 2001

11444. Oplismenus hirtellus (L.) Beauv. Gram. F (8) Sprawling gress in low flat USM KMoist area in forest margin US LA MO AAU

DEC 1 7 1981 3 spoteca amazonica (Benth.) H. Hern. Calliandra amazonica Bent.
-11445- Baddulas det. C. Niezgoda 1982. Legum. 15M (5) stender treelet 4 m. tell. Persenth pele K green. Filements white is besel 12, NY red in epical 2. Firs. dark brown. 11446. Psychotria pichisensis Standl. det. J. Kirkbril F (8) Tree 8 m. fell in understory. USM Mo Peduncle and rachis pale green NY GB INPA (24x + coto la lemon yellow. 11447-Miconia brachybotrya Triana Melast. F (5) Shrub 2 m. tall along que - USM K brada. Calyx pale green. Corolla Ny white. Let. Wurdack 1982. 11448. Encepholosphaera lasiandra Milder. Acouth. USM K forest elong que brede. Breets bright US My puch. Corolla puch det. D. Wesspersen 1882. 11449. Sanchezia peruviana (Nees) Russy Acenth. USM Ky forest. Breets derk red. Fls.
US GB pele yellow. det. D. Wasshausen 182. 11449A. Scalings in forest. Ive only on. v. 2 jossocha

DUKE 11450. Senefeldera inclinata Muell. Arg. Euphorb. (25) en Tree 18 m. tell × 20 cm.

The Jismeter on steep hills de. Jume
FR > (A) NOV fure fruits green. Fruits 3 or 4

USM GH nv. "ituchi cespi" let. M. J. Huft 1982

En C A) K

11451. Miconia bubalina (Don) Naud. Melest. (4) Shrub Z. Sm- tell in molst varie. Lis. derk green shing above, dull, white beneath. (lyx and corolla creamy white let. Wurdock 1982. 11452. Hirtella racemosa Lam. var. racemosa Chrysobalan (4) Treelet 5 m. tell in forest Ny K Shing green 28 mm long. det. G.T. Prance 182 11453. Foramer? Psychotria compta Standl. Rubiac usil8) Treelet 4 m. fell in woist F. Mp que breds. Din meture fruits pele gele.

K. G. que breds. Din meture fruits pele gele.

Sp. nov. det. L-Anderson 1982.

11454. Monotegome jurusmum loes. Morent.

(4) Herb in clumps in hillop forest.

Reset light seed Lyon Lus. shing, both sides. Breets light E brown. Fls. deep ovenge.

USM 11455. Cotyptro caryo poeppigiana kunth Cypenec My (4) Hert in forest floor. Steel Lf. beses mo and undersides red dish purple. In fl. red-purple; fres. greenil In fl. red-peuple det. G. Davidse 1982 (2) Erect herb 80 cm. tell in (2)Foret. Les. Pelen or surplish beneath. USM Pedicel white. Colyx white with F blue tij. Petelo beselly white, apical 3/4 blue-violet. Occasionel. 11457. Anthurium slienstum Schott Arac. F(2) Terrestrial herb 1 m. tzll.
USM Petrole O i x-section. Peduncle red-purple, terete. Spethe + spadix yellow-greenight. 11458; Rudgez Sessilifloro Standl. "Rubica. F (b) Treelet 2 m. tell. FRS. immsture

USM MO Shiny yellow grell. Let B. Boom

Psychotria Heam of corpa Standle 1986.

1145/ Psychotria capitata R. E. var capitata Rubiae. F (8) Shrub 2 m. tall. Fruits USM Ny green, immeteure. det. P. Matekaitis 1983

11460. Elsphoglessum LINGUA (RADDI) BRACK. Fern F(4): Creening fern on fellen tree trunk. DET. J. MICKEL 1989: 11461. Geonoma off. interrupts (R.+P.) Mart. Palmee Pola 1-2 m. tell, frequent in F(2) understory on hillside. De Pedunch USM + rachio reddioL. Fls. cream. FRs. Still green. det. S. glassman 1/83. nv. "palmichito" 11462. Psychotria erecta (Aubl.) Standl. i Steyerm. Rubiac.

F(7) Shrub 2 m-tall. Immature
48M & fruits yellow-given. det. P. Matekaitis 1982 Il 463. Elephoglossum LATIFOLIUM (Sw.) J.SM. Fern F (7). Fern growing on fellen log in USM moist quebrede. DET. J. MICKEL 1989 1464. Tococa 'Melest.

(2) Shrub Im-tell in moist quebreda.

seed & Peduncle 4 infl. red-purple. Fks.

black et meteirity: 11465. Trichomanes elegans L. R. Rich. Hymenophyll.

F(4) Feru on benks of moist quebrada.

WORD det. R. G. St. 1782.

11466. Hirtella racemusa Lam. var. racemosa Chrysobal. 15 (5) Treelet 3 m. tall. Summature
UST I fruits green ca. 20 pm long.
det. G.T. Prance 182 long.
11467. Miconia heteromera Naud. Melest. usy (6) Much breuched Shrub 3 us the Juff exis ved FRS. green furning black. det. Wurdack 1982. 11468 Castus guanaiensis Rusby Zingib-(West 2.5 m. tall in bottom fotos. of moist rocky revine. Jufl. arising on separate stem from best with a few small bever, USM U FIZ Breets red, appendegle (exposed NY js vt) green. Overy white . (elyx red. Corolla tornstucent pinh.
Steminodes rose-pinh. K. INPA n.v. "sache huiro" = infl. used to beet breasts of young gials to make them ground! Medicinal; stem chopped and drumh for diabetes. Also purgente.

11469. Mzietz guianensis Aublet var. quianensis Melzst Thrub 1.2 m. tell moist quebrede. F(5) USTI Ourry red. Petals + stameus Clamy white Lus. derh shing green above! 11470. Monotegma parvulum Loes, Morent. Herbin smell clumps on forested (5) hillside. Lus. dark velvety dull green store, pale green, some-GB WIN what shing beneath. Breets pale green. Fls. white, det. H. Kennedy 1982 11471, Heliconia vellerigera Poepp. Musac you 30) n.v. "cotamono situlli" sed USA 3 Gizut herb 8 m. tell forming
fis A F-6 lerge clumps 4 m. in dizmeter
fotos K-5 Petrolo 1.8 m. long; lemine
lanto GB-2 2.3 m. long, nerrowly ovete,
NY-2 Lvs. dull derk green ebove
. Mo-2 Shiny green or purplish benestly in young plants dark reddish surple. Infl. pendulous, spiraled; topics bracts reflexed Strongly, the red covered with dark reduct brown hairs, cream within Floral creamy white. Fls. lemon yellow,

Jovernost

Jesting segment recurved.

Fruits derh metallie blue et

Maturity.

Mother

11471-A. Piper offictum Trel.

(5) Shrub 1 m. tall in moist

USM F Guebre de. Spikes pendulous

Ny Green.

Jet. R. Collejes 1982.

11472. Piper Piperac.

(1) Erect Shrub 60 cu. tall Lvs.

F shiny blackish green above dull

ted purple beneath Spihe pendulous

green.

11473. Geonoma off. Camano Trail Paluce

(3) Trunklers Palm 1.5 m. tall forming clumps

i forest. Pedunele H mfl. red-

F-2 orzhee i fruit; green when in
flower, flowers white

det. S. g/2ssmm 1983.

11474. Geonoma off. comena Trail

[2) frunkless Delicati palm 80 cm tall.

Seld-Lyon Fruiting infl. exis red-orange. Fruits

45M black.

det. S. g/2ssman 1983.

DEC 1 7 1981 11475. Peperomia alata R. 4P. det. R. Gillejas Piperac usy Succulent herf on mossy rocks, hot seen on soil. Spikes pale green.

11476. Philodendron fritz went is Bunting Arac.

Iwe (2) Trailing herb on fallen log in hill top

USM Jorest. Peduncle + spathe cream. (12) Tree 10 m. tell x 10 cm. DBH. both sides, avomation Infl. fotos - u califlorous, from ground level USM F-2 to 1.5 m. to above ground. Infl. W brenches growing down wards and NY 3 onte ty 1-2 meters through MO K-2 INPA GB Les litter, producing flowers underground and slong serial exes. GH Tepals dell brown. 11478, Hymenophyllum polyanthes (sw.) Sw. Hymenoph. F(5) Moss-like Crelping fen on feller usy san log on ridge top. let. R. G. Stolze 182.

GB 11479. Ocotea cujumari Martius det. H.r.d. Werff 1984.

MO INFA forest on hill top. Infl. ferrigineous. Fls. cream.

Lus. Shiny derti green store, pele Juli gleucous beneath, n.v. moenille" 11480 Ossaez robusta (Triana) Cogn. Melest.

F. 13) Shrub 1.5 m. tell. Fls. buds

use greenish what. 11479A. Jessenis weberbaueri? 11481. Cariniana decandra Ducke Laythidac Ny (20) n.v. machimango colorado" Valuable timber tree. 30

Tree: In. tall x cm.

dizmeller is ridgetop forest,

Bark rough, reddish brown,

longitudinally fixmed, stringy,

Strile. det. G.T. Prance 1/82.

See # 11482. WOOD USM INPA F GB K COL GH (8) Huge Free 28 m. tall × 60 cm Berk. Stringy berk. Old fruits collected frs. - USM from forest floor. I see # 11481. Bark. n.v. mechimengo Colorado" det. G.T. Prance 1982.

11483. Miconia splendens (Sw.) Griseb. Melaston (9) Free 8 m. tell x 6 cm. DBH.

USM mo Infl. exis red; immotive fruits

F GB yellow-orange, black et metwity,

Ny Shing. det. Wurdack 1982. 11484. Psychotria boliviana Standl. Rubiaca.

1197 (4) Shrub 3 m. tall. Frs. pale green,

K Ny Shiny. (sensu Steyermark) det. P. Matekaitis 1983 Mo 11485, Philodendron crosspedodromum R.E. Schult. Arac.

USM (5) Large climbing Vine 5 m. high
in tree. Spethe light green

det. T. Crost 1982.

11486. Aechmes Bromel,

(5) Epiphyte on tree limb. Lvs.

fotos. grey-green. Peduncular breets

USM red. Infl. exis green. Celyx bronge.

us Fruits green: 11487. Micrandra Siphonoides Benth. Euphors, F(4) Na: higrilla caspi" SM tree 10 m. tall with milky GH /2 tix .. Sterile. det. M.J. Huft 1982.

(See #11488) 11487A. Gient solitory spider.

DEC 1 7 1981 Eighork. Micrandra siphonioides Benth. 11488. n.v. higrilla cespi"
Felled tree 12 m. tall on sleep
Slope. FRS. brown. det. m.J. Huft 1/82
(See # 11487) F (3) USM GH 11489. Funzi forest. Stipe of gills lemon yellow. Pikus bright orzuge. Hyospathe of gracilis Wendlex Drude Polum Slender pelu to 6 m. tell seeds-AI.F. x 2 cm. DBH growing in clumps up to 5 stewer in steep hillside forest. USM-3 Lus. about 8. Crown shaft 30 cm. NY=4 pele green. l'étièle 28 cm. long, blade F-5 foto 125 cm long with 25 pairs of baflets. Infl., lor & nodes below crown sheft. BH-3 11-3 Exis green furning ted-orange. K-3 FRS. green turning Shing black. det. J. glassman 1/83. Ny 11491. Asplenium serratum L. Fern KOSE (7) Birdnest vosette epiphyte on With 11492 det. R.G. Stolze 182. USM GH-Z

11492. Vittaria linesta (L.) J. E.Sm. Fera LONG pendulous lpiphyte fern Flive-SEL Long pendulous lpiphyte fern USIM # 11491. Asplenium K KOSE LVS. 1.5 m. long: det. R.G. Stolze 182. GH US

DEC 1 9 1981 DEC 1 9 1981 PERU: Dept. Son Mertin, Por. Moriscel Coceres. Distrito. Tocoche Muevo Caserio Bembamarca. Rio (anuto; Curarelan dia Propre-1 dad de J. Schunke V.) 23 km. Ant from Tocachlon (475m.) - Coll. T. Plowman & J. Schunke V. 11493 Imperata contracta (HBK.) Hitche. Gramin. USM "I pure stands in low wet open places,

MO TISC GH Spiked in fruit whitish det. Davidse

US n. v. "Cashu wesha"

182 thisome is considered sphrodisize. 11494. Selzginellez exeltatum (Kze) Spring. Selzginell. troble thickets in secondary forest. Nv. 'Shapumba'' (?) = Pteridium!? forest. det. R.(F. Stolze 1987. F (4) USM-KOBE AAU DET. L. BOHS 1986 11495. Cyphomondra TENUISETOSA BITTER Solanec. Shrub 1.5 m. tell in open cut-F(3) Shrub 1.5 m. tell in open c usin k over thicket. FIs. pendulous.

USM.

RNG

Mu

Petels light violet with white margin, Lus. shing darkenen above, somewhet shing lighten green beneath. th. v. "Chupo sacho silvestre" 11496. Piper hispidum Swartz Piperze.

(3) h.v. motico : used for infections,

itsm kidneys, fungus, etc. stright, erect, cream turning olive green.

det. R. Colleiss 1983. (6) nv. "pucunuchu " bet. W.H. Eshbzugh. (nlt. Shrub 2 m. tall. : Petals creem. Authors blinch, FRS. pendulous, yellow-orange, very picante. Cely x "Constricted" rest below to bed. Along with "rocoto" pepper, said to be the only aji not injurious to the dody. USM 11498 Conobea scoparioides (C. + 5.) Berth Scroph.

F (3) Weedy herb in houseyard. 11499. Fevilles cordifolis L. Cueper. (5) Nor "habilla" det. C. Jeffrey 1/83. sep femir Kenberlous vine in thicket. FRS.

USM K subglobose, 9 cm long, 10 cm in

dismeter. une: oil of seed used as condle and to make soap. Juice of stem taken for drunkenness.

11500. <u>Seperomia rhombes</u> R. + P. Piperae (3) Succulent epiphytic herb on fellen live USM tree trunk in forest cleaving. Spikes H.F. F. pale brown. det. R. Callejas 1982

(3) Therb in forest. Lus. shing derk usm green above, ted purple beneath. For them to ped unde ted purple.

Fls. pel yellow.

11502. Schoenobiblus daphnoides Mart. Thymelæc F(2) Shrub 80 cm. tall. Fls. pala yellow, hot fragrant in evening. h.v. "jaque" det. P. Matikattis 1982.

VAR. RACEMOSA (MART.) SMITH & FERNANDEZ VIOLOC.

Flight green. DET. W.A. HEKKING 1995 T.V. "50 hino runtillo"

, ;

Psychotria mathewsii Standl. Let. J. Kirbride 1504. Psychotria ramiflora Rusby Rubiec. Treelet 3 in- toll Immature F (7) fruits green, shin, Stipules creamy White, 5.5 cm. long, early coductous. NY GB (1505. Drymonis pendula (Bepp.) Wiehl. Gerner. (7) Herbaceous vune among shrubs USA K in frest clearing, to 5 m. Pedunch F set brects + pedical derk red-purple. US NY Corolle light red. Infl. long pendulous. det. L. Skog 1985. 11506. (2pparis sola Macbride (2pparac...)

F (8) Treelet 3 m. tall in small forest

USM Mb Clearing. Fruits long pendulous,

WIS u shiny, dark red-purple, white

Ny INPA within, steds light brown.

Let H. Iltis 1982. 11507. CALYPTRANTHES Ingutze.

F (2) Shrub 1.5 m. tell i forest.

USM: Juma ture fruits cormine pink. Very avometic. DET. B. HOLST 1989 Tonteles chlorantha A. C. Smith Hippocrate det. A.M. W. Mennega 1982. Hippocrat. Hat (10) K Liana. 6 m. tall g bowing on tree

U F us n. v. murchhua's ca" IST PERU RECORD

11509, Solanum confine Dunal Solanze F(F) Erect herb to 80 cm. tall in forest.

MO WY FIS. nodding; pedicel, Coly x and

BH CORD Corolla pale green. Anthers pale yellow.

Let m. nee 1982. 11510. Solenum OPPOSITIFOLIUM R. P. Jolenze. , Shrub I m. tell in Forest. Juneusm (3) ture fruits green. Lus. Shing derhyreen shore with undulate no-Mergins. DET. S.KNAPP 1989 Psychotria stenostachya Standl. Rubizc. Shrub I m. tall in forest. Peduncle pole green. Overy pale green. Cely x cream. Flow Petal cosolla white. F (3) usm 11512. Hylaezuthe unilateralis (P. + E.) Jonk. + Jonk. Marzutac.

(5) Herb 60 cm. tell in low forest. (5) lof. derh green above with distinct A righ. sheer; pele green, Slightly sking street. Flowering brenches co-3/plantwith USM GB 2-3 infl. per brench. Brackto dorselly translicent. Colyx + corollo trans-NY K epically, set. T.P. wood light green. FRS. 14 cm long x 5 cm wide.

U. "Soliman Sacha" 21. U. "Soliman Sacha"
Let. A. Gentry 1982. Acanol. 11514. Justicia F (3) Hert i forest floor. Lus. derh green. SM zbore with central silver stripe; usm US red-purple beneath. Frs. brown. 11515. Strychnos farapotensis Loganiac. (3) Treelet 4 m. tell. FRS globose, ovenge, 2 cm. dismeter. Trunk F USM NY spindse. Lus. undulate et margin. n.v. "sacha chija" 11516. Ctenanthe sp. nov. Merantae. (2) Herb 1.2 m. tall growing in USM clumps in lowlying forest. Les. Shing dark green above, duller lighter green beneath. Petrote shing green, pulyinus olive green. Juff. pedunde and exis green, mertion of breats, dark sed, Let. L. Andersson 1982. breets green. Coly x + corolla white. Staminodes typed blue violet.

11513. Jacaranda glabra (D.) Bur. + K. Schum. Biguon.

(3+3) Unbrenched fast growing treelet

F-24 m.tsll h open secondary thicket.

(Mog.) 11. Walt.

Trichostigma peruvianum Phyblecac.

Sub slakul 40 cm. tall i forest.

Tels. pale green. usm

11518, Bunchosià Melpigh. treelet 9 m. tall with few branches. F(3)forming pseudo rosette; fruits pro-USM

duced et center if rosette et bese of mejor brenches, light red-orenge

(3) Kert 30 cm. tall inforcet floor. F (3) Lus. dark sking green above dark red purple beneath. Bracto pale WS green. No flowers. det. D. Wasshausen 1/2.

11520 Policourez macrobotrys (R. P.) R.is. Rubiec Thrub 2.5-3 m. tell in Forest under -F (7) Story. Infl. exis + pedails red. USM

Overy peli green. Corolle light yellow. FRS. black. det. P. Matekaitis 1982 MG NYG

11821. Bunchosis

(5) Tree 6 m. tell x 5 cm. DBH.

FRS. light red-overge. Lvs. lightly F (5)

USM MICH undula le.

11522, Fittonia verschaffeltii var verschaffeltii Acauth. creeping herb with leaves prostrate on forest floor, dark green with light red veins. (4) USM K Brects pela green. Fls. pela yellow. 11523. Capsicum sp. nov. det Eshbaugh 19/2 Solanze Sprawling herboceous ime (15) 2 m-tell emong Thrubs at edge of Smell clearing in forest USM RNG Fls. nodding, Petalls creamy white, GB MU anthers light brown. FRS-globose, CORD GH n.v. "chintillo", very pungent. MO NY TND

(S+3) Climbing herbaceous Vino,

Am. tall on tree trunk. Fls.

John couliflorous. Process Light red.

Juner breets white, exposed part

US only red. Colyx creamy gettor.

Corolla pole yellow, lower 3 lobes

with dork ted-brown spots, Jufl.

a.H. abundant muciloge.

DET. L.E. SKOG (US) 1997

11525. Oxalis ortgiesii Regel Oxalida Herb in edge of clearing. Stems succentent, dark red. Los. dark green above, pole green beneath - Fls. yellow. (5) foto F (2) Keel in forest. Ys. dark green in ith silvery band at bese. Fis- white - Let. P. Matekaitis 1983 1152 F-Psychotria santaremica M. Arg. Kubizc-Shrub 1.5 m. tell in forcest. Breets

USM. light green. Coroll 2 white.

Het. P. Matekaitis 1983 (R. +P.) Standl.

11528. Policoure Rudgez verticellata Rubicc.

SM 1 forcest. Lus. shing Fre hezth. Inflaispele green. young fruits us duel orange det. B. Boom 1986

11529 Palicoured subspicate Huber Kubi
(4) Unbrunched Subshrub in forest.

USM LVS., metallic grey-green above with

Fyellow green midrib; light green beneath.

K

Pedunch dark red-purple. Infl. 2xis

and pedicels bright red. young fruits
yellow green; coly x remnant dark red.

t PM 1182

F 11530. Pharus latifolius L. gram. USM (5) Herb in forest. Ouf! zich gren. ISC MO Spikelets derk brown, barbed for 300 chory. der. Rw. Pohi 1983. for 300 chory. 1531. Chamae dored PINNATIFRONS (JACQ.) DERST. Palmee F (3) Solitary Single Frunched palm i understory. usM Beduncle and infl. exa and unright Seed: Lyon fruits bright orshee. Moture fruits
Shiny black. Lef. G. 6 Nevers 1986.
DET. D. HODEL 1990 USM (6) Shreel 2 m- tall FRS. greenist Meliec. NY INPA U det. T. Plowmen 1984 A yellow. 11533. Stenostephanus thyrsoides Lindau Acentl. FRS. derk brown: det. D. Wessheusen 1/82. 11534. Drymonis

(2) Herbschous vine forest cleaving,
seed Colyx pole groe. Colstel succellent,

ush

Cream, dark red within Lvs. fleshy F (4) Tree 5 m. tall with several trunks. Peduncles green, Spikes enct K. Ny pele green det. R. Callej 21982.

11536. Drecontium l'oretenne Krause Arec. (4+4) gipatictuber ferous herb 6 m. tall in usy disturbed primery forest. Petiole MO-Z & cm. diameter, with snake - like seeds K untiled pettern derh brown + white fR=A SEL with numerous spiny excres cences. plants ALL. Lynn Bru a Cro2t FTG Péduncle 80 cm. tell, derk brown. Spedix in fruit 20 cm. long X & cm. diemeter. Axis pele ohnge. Seeds ovenge, germineting in Situ. 877K 11537. Dieflenbachis (3) Erect slender herb. Stems detk Green with constic milky sap, Mb odor of "Zorvillo" (5kunk). Spethe derharen, young fruits creen & Juff. containing much liquid, stender small white lervice no. potquino segro" 11538. Cyclopeltis semicordata (Sw.) J. Sm. Fern

(t) Terrestrial rosette fem lm.

USM GH tall, det. R.G. Stolze 1982.

F-2 11539. Geonoma brongniartii Mart. Palmae USM tell. Infl. exis green turning orange in fruit. Frs. shing black.

Ny

N. V. culluli det. A. Henderson 1/83.

(3) Lyon 2-56 Terrestrial herb 60 cm. tell in live: Moforest. Cetaphythe purplish brown, Pet-USM vole O in Section. Lvs. dark shing usm Mo green above, dull pale green beneath.

Peduncle terete, light green. Spathe
erect to diverging, light green. Spadix
light green, suthers yellow ish.

det. T. Crost 1982. 11541. IXOra peruviana (Spruce) Standley Rubice. seed-Penny M. Times ture fruits red, meture

USM DIPA Times ture fruits red, meture

COL F US fruits Shing black.

And to Mr. cangrejo Micuno.

P115 42. Reneshmis breviscapo Poepp. + Endl. usm. . Acometic hert to Im. tall. Peduncle pile green. Brects olivegreen. Colyx in fruit pele overge. Jumeture fruits light green. Inv. "miski panga" det. T. Nowm. 1981. U TUPA 11543 Zamia lindenii Regel ex André Zamiac.

(7) Cycad 2.8 m. tell in flat

USM M6 forest. Frunk pale brown to 30 F-3 GB Can. tall. Petiste 70 cm. long, blade 1.50 in long, with 25 leaflets per side. Sterile. nv. "Sacha piña

11540 Authorium alienatum Schott Arac.

DEC 1 9 1981

det. B. Alverson 1985.

11544, Quararibea oblongifolis Poep. + Endl. Bombaco (8) Tree 8 m. toll × 6 cm. DB#.

FRS. cauliflorous on the brenches,

seeds. Lyon

obovaid, 4 cm. long x 4.5 cm. diameter, accurage at mosturity, 5 seeded. N. v. "sapotillo"

He liconia spathicircina da Aristeguieta Musac. F. BRY Wis Ko

11545. Herb 1.5 m. tell in forest claring (10)

Lus. Hark velvety dull green above, USIT light shing green beneath. Jufl. 1-3 GB erect, peduncle purplish brown.

Brench bracks spiralled, bright red, recurved spically. Floral bracks, pedial overy and perionth golden yellow.

Clavija POEPPIGII MEZ

Unbruched Shrub 1-2.5 on tall.

Lus. storied in rosette secunding.

FRS. Crowded 2 mong leef bestes, green, orange at metanting string, to 22 mm, down

Lus. Jark green above lighter green

beneath, bullate, Shiny both sider (4) MSM GB

(2) Unbranched Shrub 60 cm. Tall.

selds you Lus. dull medium green above, dull USM pole green beneath, slightly bullate. E FRS. orenge, to 13 mm. diameter, 4 seeded.

11548. Posoqueria longiflora Aubl. Rubiza. (12) Tree 8 m. tall x 6 cm. DBH. Toto UST us to 5.5 cm long x 3.5 cm: in dia
GH F TNA meter. Aril around seeds pale orang.

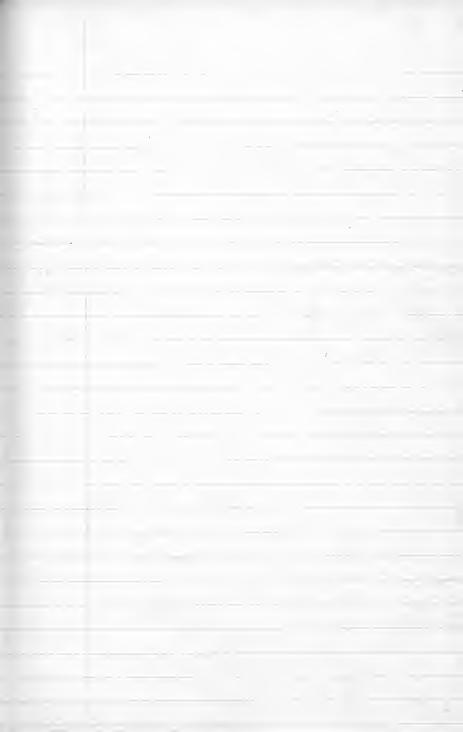
det. P. Matekaitis 1982 11549. Anthurium crostii Madison Arac. Terrestrial herb 1,3 m. fall. i forest Petiole Helete green. Peduncle reddish brown, lerete K. Sprithe erect, Corieceous, light green. Spradix bluish green. MO Rubiac. 11549A. Genipa somericana Chr. Bot. gard. Fruit on ground. Seed only.

Seed only.)

11549B. Loud Snoil (on 11537
(1) Doffenbachia?)

F

to here: 2454 total dups.



MA Encephelat. 1 60 13.5 2 % 18 28 Epulchra 10173 3 % f. 56 Rub. 29 " Bh 2 6 18 Inforde 9 /25 fil - M 1.2m. 30 5 /25 fil pingle 12h 31 " E 11 11 11 111 7 /25 F8 purple 1.2 m 33 " 8 " fil purple . 7 m 34 Hisgno! " f8 " .7 m 35 " 5.6 10 /2s f 22 36 " 5.6 13 14 125 + 11 15.F8 11 " F8 SF Bonelias 17 18 125 f16 M caspi 125 (2 19) B.7 11 KW 20 KS F16 M x Tackez 22 /25 FIL M 23 1 F22 M 24 " f32 1 · f11 M .65 m 10174 76" f16 M 2711 522 11,65

